

# Environmental Impact Analysis Process Document

FONPA and Supporting AF Form 813



Title: Demo Consolidate Vehicle  
Operations to Building 52

MacDill Air Force Base, Florida

# Finding of No Practicable Alternative



**FINDING OF NO PRACTICABLE ALTERNATIVE  
DEMOLISH AND CONSOLIDATE VEHICLE OPERATIONS  
MACDILL AIR FORCE BASE, FLORIDA**

**Agency:** United States Air Force (USAF), Headquarters, Air Mobility Command

**Background:** Pursuant to the provisions of Executive Order 11988 and AFI 32-7064, paragraph 4.3, the U.S. Air Force conducted an assessment of the potential environmental consequences associated with implementation of the following Proposed Action: demolish and consolidate vehicle operations. The Proposed Action was found to fit within a Categorical Exclusion (32 Code of Federal Regulations (CFR) Part 989, Appendix B, paragraphs A2.3.8 and A2.3.11); therefore further environmental analysis under National Environmental Policy Act of 1969 (NEPA) was not required (see attached AF Form 813). This Finding of No Practicable Alternative (FONPA) summarizes the alternatives considered and explains why the project was designed and sited as proposed. The Tampa Tribune published a request for public comment on 16 April 2015, and the Air Force placed a copy of the Draft Air Force Form 813 and Draft FONPA in the public library for review. No comments were received during the public comment period ending 14 May 2015.

**Proposed Action:** The Proposed Action includes four components: 1) Interior renovation of Building 52; 2) construct a new ~138,000 ft<sup>2</sup> vehicle parking area and a ~4,200 ft<sup>2</sup> drive-thru wash rack within the parking area; 3) demolition of three vehicle operations facilities (Building 119 {vehicle detailing shed}, Building 175 {administrative facility}, Building 178 {vehicle wash rack}), and removal of leased modular facility; and 4) conversion of the current vehicle operations parking area to a 88,158 ft<sup>2</sup> general use parking lot.

**Alternatives:** Three alternatives to implementation of the Proposed Action were considered during the environmental impact analysis process. One was eliminated from further analysis and two were carried forward for analysis. The first alternative involved constructing a new vehicle operations facility in its current location. This alternative does not meet the need for the action. The second alternative involved constructing a new Logistics Readiness Complex and would construct a 32,132 ft<sup>2</sup> facility, 293,878 ft<sup>2</sup> of impervious surface that included the demolition of Buildings 119, 175, 178, 500, and 510. The last alternative is the No Action Alternative, which would result in the demolition and consolidation of vehicle operations not being completed. The vehicle operations flight would continue to operate from their existing facilities with no change in current operations. Vital customer service functions at MacDill would continue to operate in old, inefficient, cramped spaces.

**Floodplains:** The proposed demolition and consolidation of vehicle operations will be completed in the 100-year coastal floodplain. Executive Order 11988, *Floodplain Management*, as amended on 30 January 2015 by EO 13690, *Establishing a Federal Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*, seeks to avoid construction of facilities or structures within the floodplains “to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains”. The project would not construct within the floodplain a facility that is occupied by personnel which would in turn jeopardize human safety, health and welfare. The vehicle operations parking area, parking lot, and wash rack would not be required to be elevated above the 100-year floodplain since the new wash rack can withstand submersion, has sufficient openings, and would not be damaged by flooding and the parking areas are solely used for storage. The MacDill Real Property manager determined the replacement cost (market value) for Building 52 is \$4,250,259. The estimated cost to renovate Building 52 is approximately \$1,937,679 which is approximately 46% of the market value of Building 52; repair costs to correct existing violations add another \$279,021 to the total project cost. Therefore, the renovation of

Building 52 is not considered a substantial improvement and is not required to be elevated above the 100-year floodplain. In addition, the project would not negatively impact the natural and beneficial value of the floodplain since the Proposed Action would flow into a new adequately sized stormwater management system to compensate for any added impervious surfaces. Similar to the function of a floodplain, these stormwater management systems collect, store, and treat stormwater runoff from the site and allow it to slowly infiltrate back into the ground following a storm event.

**Florida Coastal Zone Management:** In accordance with the Federal Coastal Zone Management Act (CZMA) and the Florida CZMA, this Federal action must be consistent “to the maximum extent practicable” with the Florida Coastal Management Program (CMP) or a Negative Determination found. The Air Force has determined the project has no coastal effects, prepared a Negative Determination, and the State of Florida has concurred with this determination.

**FINDING OF NO PRACTICABLE ALTERNATIVE:** Considering the information contained herein (including the attached AF Form 813), in accordance with EO 11988, and pursuant to the authority delegated to me, I find that there is no practicable alternative to completing the proposed project within the 100-year coastal floodplain. The Proposed Action, as designed, includes all practicable measures to minimize harm to and within the coastal floodplain.

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**ROWAYNE A. SCHATZ, JR.**  
**Major General, USAF**  
**Vice Commander, Air Mobility Command**

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**DATE**

# Supporting AF Form 813



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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------------------|---|
| <b>-REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                | Report Control Symbol<br>RCS: <b>2015103</b>                                              |   |
| INSTRUCTIONS: Section I to be completed by Proponent. Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).                                                                                                                                                                                                                                                                                                         |                                                                |                                                                                           |   |
| <b>SECTION I – PROPONENT INFORMATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                | <b>LOG ID#: 15-0005</b>                                                                   |   |
| 1. TO (Environmental Planning Function)                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2. FROM (Proponent Organization and functional address symbol) | 2a. TELEPHONE NO.                                                                         |   |
| 6 CES/CEV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 6 CES/DD                                                       | 813-828-2718                                                                              |   |
| 3. TITLE OF PROPOSED ACTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                |                                                                                           |   |
| Demo Consolidate Vehicle Operations Bldg 52                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                |                                                                                           |   |
| 4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date)                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                |                                                                                           |   |
| (see attached)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                |                                                                                           |   |
| 5. DESCRIPTION OF ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action)                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                |                                                                                           |   |
| (see attached)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                |                                                                                           |   |
| 6. PROPONENT APPROVAL (Name and Grade)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 6a. SIGNATURE                                                  | 6b. DATE                                                                                  |   |
| ROBERT D. MOORE, GS-13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | \\ ELECTRONICALLY SIGNED \\                                    | 3/19/2015                                                                                 |   |
| <b>SECTION II – PRELIMINARY ENVIRONMENTAL SURVEY</b> (Check appropriate box and describe potential environmental effects including cumulative effects) (+=positive effect; 0=no effect; - = adverse effect; U=unknown effect)                                                                                                                                                                                                                                                                                         |                                                                | +                                                                                         | 0 |
| 7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                |                                                                                           | X |
| 8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                |                                                                                           | X |
| 9. WATER RESOURCES (Quality, quantity, source, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                |                                                                                           | X |
| 10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity distance, bird/wildlife aircraft hazard, etc.)                                                                                                                                                                                                                                                                                                                                                                   |                                                                | X                                                                                         |   |
| 11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                |                                                                                           | X |
| 12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                |                                                                                           | X |
| 13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                |                                                                                           | X |
| 14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                |                                                                                           | X |
| 15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                |                                                                                           | X |
| 16. OTHER (Potential impacts not addressed above.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                |                                                                                           | X |
| <b>SECTION III – ENVIRONMENTAL ANALYSIS DETERMINATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                |                                                                                           |   |
| 17.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | X                                                              | PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # <u>A.2.3.11</u> ; OR        |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                | PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED. |   |
| 18. REMARKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                |                                                                                           |   |
| MacDill AFB is located in an attainment area for all the criteria pollutants and no conformity determination under the Clean Air Act is required.                                                                                                                                                                                                                                                                                                                                                                     |                                                                |                                                                                           |   |
| CATEX A2.3.8 - Performing interior and exterior construction within the 5-foot line of a building without changing the land use of the existing building. The interior renovations of Building 52 qualify for this CATEX.                                                                                                                                                                                                                                                                                             |                                                                |                                                                                           |   |
| CATEX A2.3.11 - actions similar to other actions which have been determined to have insignificant impact in a similar setting as established in an environmental impact statement (EIS) or an EA resulting in a Finding of No Significant Impact (FONSI). 2013 Installation Development Environmental Assessment, FONSI/FONPA Signed 18 April 2013, construction project I1, Construct Logistics Readiness Complex. The new vehicle parking area, washrack, and demolition of 119, 175, & 178 qualify for this CATEX. |                                                                |                                                                                           |   |
| 19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade)                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                | 19 a. SIGNATURE                                                                           |   |
| 19 b. DATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                |                                                                                           |   |
| ROBERT B. HUGHES, GS-14<br>Director, 6th Civil Engineer Squadron                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                |                                                                                           |   |

## **4.0 PURPOSE AND NEED FOR ACTION**

**4.1 PURPOSE:** The purpose of the Proposed Action is to renovate Building 52 for the 6th Logistics Readiness Squadron (6 LRS) Vehicle Operations Flight, construct a new vehicle parking area and washrack, and demolish existing inadequate vehicle operations facilities. The 6 LRS Vehicle Operations currently operates in Buildings 119, 175, 178, and leased modular Building 3175. In addition, the current Vehicle Operations area would be converted to a parking lot.

**4.2 NEED FOR ACTION:** MacDill needs a Vehicle Operations Flight operating out of facilities that meet current Air Mobility Command (AMC) and Air Force standards. Existing vehicle operations facility was rated the worst in AMC over five years ago and no major upgrades have been accomplished to date. Vehicle Operations are operating in substandard facilities with space deficiencies augmented by a leased modular building. The existing location of the 6 LRS Vehicle Operations Flight is incompatible with the base general development plan and limits movement of the fleet due to high concentrated traffic in these areas.

## **5.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES**

**5.1** The Proposed Action includes four components; 1) Interior renovation of Building 52; 2) construct a new ~460 ft by ~300 ft (~138,000 ft<sup>2</sup>) vehicle parking area and an ~82 feet by ~50 feet (~4,200 ft<sup>2</sup>) wash rack within the parking area; 3) demolition of three vehicle operations facilities, Building 119 (924 square feet [ft<sup>2</sup>]), Building 175 (2,000 ft<sup>2</sup>), Building 178 (1,600 ft<sup>2</sup>), and removal of a leased modular Building 3175 (2,715 ft<sup>2</sup>); and, 4) conversion of current (existing) vehicle operations parking area to a 88,158 ft<sup>2</sup> general use parking lot. The conversion of the current (existing) vehicle operations parking area would not add any additional impervious surface. The proposed new washrack would be constructed within the proposed new vehicle parking area; therefore, no additional impervious surface would be needed for the washrack. The Proposed Action is located in the 100-year floodplain.

**5.2** The entire site proposed for construction/renovation is in an area of the base adjacent to the south aircraft parking apron that is highly developed. The location for the proposed new 6 LRS Vehicle Operations area, as well as, the location of the buildings proposed for demolition is presented in Figures 1 and 2. The proposed location of the vehicle operations and demolition area overlain against existing base constraints is presented in Figure 3. The demolition site plan for the existing vehicle operations area is presented in Figure 4. The site plan for the conversion of the existing vehicle operations area to a general use parking lot is presented in Figure 5. The site plan for the new vehicle operations area parking area and wash rack is presented in Figure 6. The land use surrounding the Proposed Action is a mix of industrial, aircraft operations and maintenance, and administrative.

### **5.3 Proposed Action:**

**5.3.1** The Proposed Action would renovate and repair the interior of Building 52. The interior would be reconfigured to meet the needs of the vehicle operations flight. Repairs and upgrades to the air conditioning, plumbing, electrical, fire detection, and communications would be made. The renovated building would comply with DoD minimum antiterrorism construction standards. Prior to any renovations, an asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) and lead-based paint (LBP) screening would be completed for Building 52. The contractor shall provide notification to the Environmental Protection Commission of Hillsborough County and hire a qualified environmental abatement

subcontractor to remove and dispose of any asbestos containing building material found in the respective facilities in accordance with applicable Federal and state regulations. The same environmental firm shall perform environmental monitoring during the abatement work in accordance with military, Environmental Protection Agency, and all other applicable environmental regulations. All waste disposal manifests shall be turned over to the government upon completion of the demolition work.

**5.3.2** The National Floodplain Insurance Program (NFIP) and MacDill AFB's Floodplain Management Plan (FPMP) requires that all new construction and substantial improvements be elevated above the 100-year floodplain. A substantial improvement, as defined in 44 CFR 59.1, is any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. The term does not, however, include any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions. The MacDill Real Property manager determined the replacement cost (market value) for Building 52 is \$4,250,259. The estimated cost to renovate Building 52 is approximately \$1,937,679 which is approximately 46% of the market value of Building 52; repair costs to correct existing violations adds another \$279,021 to the total project cost. Therefore, the renovation of Building 52 is not considered a substantial improvement and is not required to be elevated above the 100-year floodplain.

**5.3.3** A new ~138,000 ft<sup>2</sup> vehicle parking area and a ~4,200 ft<sup>2</sup> wash rack with an oil water separator would be constructed southeast of Building 52 between Marina Bay Drive and south aircraft parking apron as shown in Figure 6. The new wash rack would be located within the new vehicle parking area.

**5.3.3.1** The new vehicle parking area would be graded using heavy equipment to remove any vegetation and create a smooth surface. Additional subbase material would be delivered and prepared using heavy equipment. The pavement area would be graded for proper stormwater collection and treatment. Concrete curbing would be constructed by setting forms by hand, placing concrete within the forms, letting the concrete set up, and then removing the forms. Once a solid, smooth subbase and curbing is prepared, hot asphaltic concrete would be placed across the area proposed for paving. The asphaltic concrete would be placed using heavy equipment and then compacted and smoothed using a roller compactor.

**5.3.3.2** The new wash rack would be a pre-engineered metal building with concrete flooring and would include two wash bays and one vehicle detailing bay. The Proposed Action would result in construction of a non-residential structure in the floodplain that would not be permanently manned which would not be subject to damage from floodwaters. The facility is a drive-thru vehicle wash rack with floor drains in the wash bays. The proposed wash rack facility design includes sufficiently sized openings to allow the equalization of hydrostatic pressure on exterior walls should a flood event occur. The oil water separator will be a simple gravity design with baffles and a sealing lid. By design the oils and sludge are trapped in the separator and can only be removed by opening the lid.



**5.3.3.3** The vehicle wash area would consist of a curbed, concave concrete slab with a center drain. The water and detergent used during vehicle washing would be contained on the concrete slab and drain to the base sanitary sewer system for treatment at the base wastewater treatment plant (WWTP). The vehicle wash area would also have a roof that completely covers the concrete slab in the washing area to reduce the potential for stormwater to enter the sanitary sewer system. The vehicle wash rack facility would include the installation of an oil water separator. Vehicle washing may result in the removal of oil, grease, and residual fuels from the vehicle which would enter an oil water separator which would be connected to the sanitary sewer system and flow to the base wastewater treatment plant. No modification to the base's National Pollution Discharge Elimination System (NPDES) industrial permit would be required with construction of the new vehicle wash rack.

**5.3.3.4** The potable water line installation to the wash rack would include the installation of a backflow prevention device. The sanitary sewer system installation to the wash rack would include a lift station downstream of the oil water separator. Backflow prevention devices and lift stations meet the requirements for floodproofing the facility.

**5.3.3.5** To compensate for the increased impervious surfaces, management of the additional stormwater would be required. As a part of the construction, a new stormwater detention basin would be constructed to accommodate additional stormwater during periods of heavy rainfall. The base water program manager evaluated the project and determined that a new Environmental Resource Permit (ERP) would be needed to account for the additional impervious surface. The new parking areas would be designed to manage stormwater runoff in accordance with the local Southwest Florida Water Management District (SWFWMD) rules through construction of a dry retention basin(s). The dry retention basin design retains stormwater and allows it to percolate into the soil to avoid potentially harmful discharges to surface water bodies. A skimmer would be installed at the overflow point to prevent trash from leaving the stormwater retention basin.

#### **5.3.4 Demolition of Buildings 119, 175, and 178**

**5.3.4.1** Building 119 is a 924 ft<sup>2</sup> metal vehicle parking shed that would be demolished as part of the Proposed Action. The facility was constructed in 1982. The December 2012 Brief Evaluation of Cold War Facilities for MacDill AFB determined Facility 119 is not eligible for the National Register of Historic Places (NRHP). On 6 February 2013, the Florida State Historic Preservation Office (SHPO) agreed with the determination.

**5.3.4.2** Building 175 is a 2,000 ft<sup>2</sup> administrative vehicle operations facility that would be demolished as part of the Proposed Action. The facility was constructed in 1989. The December 2012 Brief Evaluation of Cold War Facilities for MacDill AFB determined Facility 175 is not eligible for the NRHP. On 6 February 2013, the SHPO agreed with the determination.

**5.3.4.3** Building 178 is a 1,600 ft<sup>2</sup> metal vehicle wash rack that would be demolished as part of the Proposed Action. The facility was constructed in 1990. This facility was constructed after the Cold War period (1989).

**5.3.4.4** Demolition and site preparation would be accomplished by equipment such as front-end loaders, bulldozers and track-hoes. Prior to disturbing the various sites, a silt

fence would be installed around the construction and demolition sites to reduce erosion resulting from wind and surface water runoff. Demolition would be accomplished by physically knocking down the existing concrete block structure and supporting infrastructure. The 'wet demolition' method would be used to suppress the release of dust and other particle matter during demolition. The rubble generated during demolition would be loaded into roll-off dumpsters and hauled off base for disposal at a certified construction and demolition debris landfill in the local area. Prior to initiating any demolition activities, the contractor shall perform a comprehensive asbestos National Emissions Standard for Hazardous Air Pollutants (NESHAP) demolition survey of buildings 119, 175, and 178 and LBP screening of all facilities. The contractor shall provide notification to the Environmental Protection Commission of Hillsborough County and hire a qualified environmental abatement subcontractor to remove and dispose of any asbestos containing building material found in the respective facilities in accordance with applicable Federal and state regulations. The same environmental firm shall perform environmental monitoring during the abatement work in accordance with military, Environmental Protection Agency, and all other applicable environmental regulations. Based on generator knowledge (40 CFR 262.11), the demolition debris for the facilities would not fail the Toxicity Characterization Leaching Procedure (TCLP) test and, hence, will not be regulated as a hazardous waste. Therefore, material containing lead-based paint can be disposed as construction demolition debris with no further management required, provided that the painted surfaces are not stripped or sand-blasted prior to removal. All waste disposal manifests shall be turned over to the government upon completion of the demolition work.

**5.3.5** After removal of leased modular Building 3175, fence removal, and the demolition of Buildings 119, 175, and 178, the old vehicle operations area would be converted to a general use parking lot. The conversion of the current (existing) vehicle operations area would not add any additional impervious surface. The areas where the demolition occurred would be prepped for placement of asphalt and the rest of the area would be milled. Additional subbase material would be delivered and prepared using heavy equipment. The pavement area would be graded for proper stormwater collection and treatment. Concrete curbing would be constructed by setting forms by hand, placing concrete within the forms, letting the concrete set up, and then removing the forms. Once a solid, smooth subbase and curbing is prepared, hot asphaltic concrete would be placed across the area proposed for paving. The asphaltic concrete would be placed using heavy equipment and then compacted and smoothed using a roller compactor.

**5.3.6** Disturbance of vegetation and surface soils associated with demolition and new construction creates the potential for erosion by wind and surface water runoff. Prior to disturbing the construction site, silt fence would be installed around the entire area of construction. All construction activities would employ best management practices to prevent erosion of surface soils and sediment runoff. If needed, the construction contractor would secure and comply with the conditions of a National Pollutant Discharge Elimination System (NPDES) Construction Generic Permit (CGP) through use of erosion control techniques such as silt fencing, sediment traps, and application of water sprays. Prior to submitting the Notice of Intent (NOI) to obtain coverage under the CGP, contractor must prepare a Storm Water Pollution Prevention Plan (SWPPP) and submit it to Base Environmental for approval. Once construction is complete and landscaping has been installed, any remaining disturbed areas of the site would be covered with a layer of sod.

**5.4 Alternatives Considered But Eliminated From Further Study** – The Environmental Impact Analysis Process requires the Air Force to analyze reasonable alternatives to the Proposed Action and the No Action Alternative. Reasonable alternatives are those that “meet the underlying purpose and need for the Proposed Action and that would cause a reasonable person to inquire further before choosing a particular course of action.” Alternatives may be eliminated from detailed analysis based on operational, technical, or environmental standards that are applicable to the project. Additionally, Executive Order 11990, Floodplain Management, requires the consideration of practicable alternatives to avoid adverse effects and incompatible development in the floodplain. Practicable alternatives are those that are capable of being done within existing constraints and include consideration of pertinent factors including the environment, community welfare, cost, and available technology. Two alternatives to the Proposed Action were initially considered but eliminated from further study as unreasonable and/or impracticable. The alternatives are described below:

**5.4.1** An alternative location for this has been proposed on the site currently occupied by LRS vehicle operations, which is on the northeastern portion of the installation between North Boundary Boulevard and Bayshore Boulevard at the current location of Buildings 119, 175, 178, and 3175. This alternative would require a phased approach to the construction and demolition (C&D) component. Vehicle operations would have to temporarily relocate to the LRS vehicle maintenance compound. The demolition of Buildings 119, 175, 178, and 3175 would occur next and then the new vehicle operations facilities would be constructed in this area.

This location is situated within the 100-year floodplain, and is adjacent to an historic district and an ERP site. This alternative would meet the current space requirements. However, this alternative does not meet the need described in Section 4.2 with respect to the existing location of Vehicle Operations being incompatible with the base general development plan and limits movement of the fleet due to high concentrated traffic in these areas. Therefore, this is not a reasonable or practicable alternative. No other unconstrained sites are available outside of the floodplain on MacDill AFB.

## **5.5 Description of Alternatives**

Two alternatives to the Proposed Action were considered to determine whether they met the underlying purpose and need for the Proposed Action. The alternatives are 1) Construct Logistics Readiness Complex and 2) the No Action alternative are summarized below.

**5.5.1** This Alternative would construct a Logistics Readiness Complex, a 32,132 ft<sup>2</sup> facility that included the demolition of Buildings 119, 175, 178, 500, and 510. This project consists of constructing a 32,132-ft<sup>2</sup> facility, properly designed and centrally located, to consolidate vehicle maintenance, transportation, administrative, and operational functions adjacent to the Supply Warehouse (Building 49). The Logistics Readiness Complex would also add approximately 293,878 ft<sup>2</sup> of impervious surface (parking lots). A drainage ditch exists around Building 49 and out towards the flightline, where it splits into two ditches. Marina Bay Drive would cross these two ditches. The existing 26,600-ft<sup>2</sup> roadway would be straightened and new culverts constructed to cross the two ditches, and would increase impervious surfaces by 9,100 ft<sup>2</sup>. The new facility would include anti-terrorism/force protection (AT/FP) measures, parking lot, and communication infrastructure. The estimated cost for the entire project including construction of the new facility, parking, landscaping and stormwater management systems, and the

demolition is \$12M. This project would be considered a Military Construction (MILCON) project and under the current fiscal climate is not likely to be funded. This project would have more environmental impacts than the Proposed Action including impacting two major drainage ditches. This is not the preferred alternative.

**5.5.2** The No Action Alternative would not renovate Building 52 for the 6th Logistics Readiness Squadron (6 LRS) Vehicle Operations Flight, construct new vehicle parking area and washrack, and demolish existing inadequate vehicle operations facilities. The Vehicle Operations Flight would continue to operate from their existing facilities with no change in current operations. Vital customer service functions at MacDill would continue to operate in old, inefficient, cramped spaces. MacDill's ability to provide excellent customer service will continue to be hindered by these substandard facilities. Current facilities are inefficient and expensive to maintain and operate, which puts additional pressure on an already constrained facility operations budget. This is not the preferred alternative.

## **6.0 SUPPORTING DOCUMENTATION**

**6.1** MacDill Air Force Base completed an Installation Development Environmental Assessment (IDEA) in April 2013. The IDEA's installation-wide approach to environmental impact analysis ensures that substantial restrictions to base development projects are identified early and avoided. The IDEA used a constraints based approach to compile information on eleven (11) different resource areas; noise, land use, air quality, geological resources, water resources, biological resources, cultural resources, socioeconomic and environmental justice, infrastructure, hazardous materials and waste, and safety; to examine the potential environmental effects the future development of MacDill Air Force Base would have on these resources. The IDEA evaluated all base development projects programmed for the five year planning period between 2012 and 2017 by grouping those projects into five categories; (1) demolition, (2) construction, (3) infrastructure improvement, (4) natural infrastructure management, and (5) strategic sustainability performance projects. These five categories were selected because they allow grouping of initiatives by the generally common elements of the activity and the nature of the potential environmental impacts. The IDEA determined the projects evaluated in the IDEA would not individually or cumulatively have a significant impact on the environment and a Finding of No Significant Impact/Finding of No Practicable Alternative (FONSI/FONPA) was signed by AMC/A7 on 24 April 2013.

**6.2** The Air Force Environmental Impact Analysis Process uses the AF Form 813 to narrow and focus issues on potential environmental impacts and to document certain categorical exclusion (CATEX) determinations. CATEXs define those categories of actions that do not individually or cumulatively have the potential for significant effects on the environment. Actions that usually do not require additional environmental analysis include those that have minimal adverse effects on the environment; do not result in any significant change to the existing environment; do not have any significant cumulative environmental impacts; or those actions that are similar to actions that have previously been assessed and found to have no significant environmental impacts. CATEXs are described in Appendix B to 32 Code of Federal Regulations Part 989.

**6.3** The MacDill AFB Environmental Planning Function (6 CES/CEIE) has determined that the interior renovations of Building 52 portion of the Proposed Action qualifies for exclusion from further analysis under CATEX A2.3.8. CATEX A2.3.8 exempts from further environmental

analysis "Performing interior and exterior construction within the 5-foot line of a building without changing the land use of the existing building."

**6.4** 6 CES/CEIE has determined the demolition of Buildings 119, 175, and 178, and the construction of a new vehicle parking area and washrack portion of the Proposed Action qualifies for exclusion from further environmental analysis under CATEX A2.3.11. CATEX A2.3.11 exempts from further environmental analysis "actions similar to other actions which have been determined to have an insignificant impact in a similar setting as established in an Environmental Impact Statement or Environmental Assessment resulting in a Finding of No Significant Impact." The demolition of Buildings 119, 175, and 178 were specifically analyzed in the IDEA construction project C2, Construct Logistics Readiness Complex and environmental conditions and impacts have not changed since the preparation of the IDEA. The MacDill Environmental Planning Function has determined the new vehicle parking area and washrack portion of the Proposed Action are sufficiently similar to the IDEA construction project C2, Construct Logistics Readiness Complex and would occur in a similar environmental setting based on the following observations:

The IDEA evaluated the construction of the Logistics Readiness Complex, a 32,132 ft<sup>2</sup> facility that included the demolition of Buildings 119, 175, 178, 500, and 510. The proposed Logistics Readiness Complex would have added approximately 293,878 ft<sup>2</sup> of impervious surface. The construction activities required for the Proposed Action are considered similar, although on a much smaller scale, to the construction techniques used for the IDEA Logistics Readiness Complex project, and are being accomplished in a similar environmental setting. Similarities include both projects being constructed in a developed portion of the base with maintained grassy areas and adding impervious surface. Additional similarities are identified in the subsequent Sections below. The locations of the Construct Logistics Readiness Complex and the new vehicle parking area and washrack portion of the Proposed Action overlain against existing base constraints are presented in Figure 3 which demonstrates the similarity of the environmental constraints. The location of Bldg 52 is approximately 500 ft southwest of the Construct Logistics Readiness Complex project. The IDEA examined the following resource areas: noise, land use, air quality, geological resources, water resources, biological resources, cultural resources, socioeconomic and environmental justice, infrastructure, hazardous materials and waste, and safety; to evaluate the potential environmental effects the infrastructure improvements on MacDill Air Force Base would have on these resources. A discussion of the resource areas analyzed for the IDEA as they relate to the construct vehicle parking area and washrack portion of the Proposed Action follows.

**6.4.1 Noise:** Similar to the Logistics Readiness Complex, short-term moderate adverse effects on noise levels would be expected from the construction activities of the Proposed Action. The noise emanating from the proposed construction of the vehicle parking area and washrack would be localized, short-term, and intermittent during operation of construction equipment, as would the construction of the Logistics Readiness Complex. Construction noise varies depending on the type of construction being done, the area that the construction would occur in, and the distance from the source. The construction of the Proposed Action would be expected to result in the noise levels similar to the Construct Logistics Readiness Complex but for a much shorter duration and less intense. The Proposed Action is expected to be constructed in approximately six months and the Construct Logistics Readiness Complex construction was expected to require eighteen months for completion. The Construct Logistics Readiness Complex construction would have required a greater variety and more equipment than the

Proposed Action. The following tables present the occupied facilities that would be expected to have temporary noise impacts associated with Proposed Action.

**Table 1 - Potential Noise Impacts from the construction of vehicle parking area and washrack**

| Temporary Noise Impacted Facility/Use                                               | Distance from Proposed Action (feet) | Estimated Combined Noise Level |
|-------------------------------------------------------------------------------------|--------------------------------------|--------------------------------|
| Bldg 49, Logistics Readiness Squadron<br>Bldg 847, SOCOM & CENTCOM Deployment Cells | ~300                                 | 75-80 dBA                      |
| Bldg 90, Air Passenger Terminal & Alternate Command Post                            | ~400                                 | 72-76 dBA                      |
| Bldg 79, Joint Communication Support Element                                        | ~500                                 | 66-74 dBA                      |

The Proposed Action is not anticipated to create additional operational noise that would impact adjacent land uses. The adjacent receptors would probably experience noise impacts from construction and/or construction-related vehicles. The magnitude of these impacts would be directly related to the proximity of the occupants and workers to the construction site. In addition, the impacts vary according to the activity occurring on any particular day, and impacts would cease when construction is completed. Given the proximity to these facilities, impacts from construction noise are unavoidable. However, construction noise is short-term and only occurs during the daylight hours. Construction equipment would be used only as necessary and would be maintained to the manufacturer's specifications to minimize noise impacts. It is not anticipated that the short-term increase in ambient noise levels from the Proposed Action would cause significant adverse impacts on the surrounding populations. Once the proposed projects are completed, the ambient noise level would return to its normal level. No long-term impacts on the ambient noise level would occur as a result of the Proposed Action.

**6.4.2 Land Use:** Similar to the Construct Logistics Readiness Complex, no adverse effects on land use would be expected from the Proposed Action. The land use would not change.

**6.4.3 Air Quality:** Insignificant short-term minor intermittent impacts to air quality would be expected to result from the construction and demolition activities. These impacts would result from vehicle emissions from heavy equipment, as well as, fugitive dust generated by construction activities. The IDEA calculated the emissions for the criteria pollutants that would result from construction of the Construct Logistics Readiness Complex. The calculated emissions for the Construct Logistics Readiness Complex and Proposed Action are provided in the following table. MacDill AFB is in attainment for all criteria pollutants, so the General Conformity Rule does not apply. Furthermore, the criteria pollutants generated by the Demo/Consolidate Vehicle Operations Bldg 52 would not exceed 10 percent of Hillsborough County emissions values.

**Table 2 – Estimated Emissions from the construction of vehicle parking area and washrack**

| Proposed Project                     | NO <sub>x</sub><br>(tpy) | VOC<br>(tpy) | CO<br>(tpy) | SO <sub>x</sub><br>(tpy) | PM10<br>(tpy) | PM2.5<br>(tpy) | CO <sub>2</sub><br>(tpy) |
|--------------------------------------|--------------------------|--------------|-------------|--------------------------|---------------|----------------|--------------------------|
| Logistics Readiness Complex          | 7.110                    | 1.231        | 5.626       | 0.563                    | 19.716        | 2.495          | 1,007.682                |
| Proposed Action                      | 3.011                    | 0.415        | 2.029       | 0.238                    | 4.887         | 0.691          | 409.880                  |
| 10% of Hillsborough County Emissions | 5,635                    | 3,579        | 20,156      | 1,908                    | 1,754         | 431            | 22,600,000*              |

**6.4.4 Geological Resources:** Similar to the Construct Logistics Readiness Complex, short-term minor adverse effects would be expected from grading, excavating, and grooming of the soil. Impacts on previously undisturbed soils would be expected to be minimal because these portions of MacDill AFB have historically been intensely used. Grading, excavation and recontouring of soil materials would adhere to all Federal, state, and local regulations.

Similar to the Construct Logistics Readiness Complex, the Proposed Action is located near or adjacent to a clean-up site. The Proposed Action was evaluated for the potential for impacts to and/or from documented hazardous waste clean-up sites (both Environmental Restoration Account {ERA} and non-ERA funded sites) at MacDill AFB. There are two Environmental Restoration Program (ERP) sites (57 and TU/US-C500) located adjacent to the Proposed Action and contact with contaminated media is not expected with this project (See Figure 3). The Construct Logistics Readiness Complex is also located adjacent to ERP sites 57 and TU/US-C500. If soil contamination is discovered during site preparation, construction activities would be halted until coordination with the MacDill ERP office could be completed to determine the appropriate management strategy for the site. If contaminated soil is encountered, it may be placed back where it was excavated from. If there is not enough space in the excavation area to replace all the removed soil, it must be hauled off site for treatment and disposal at the contractor's expense. The contaminated soil may not be placed on another area of the site. Therefore, no significant impacts on soils would be expected from the Proposed Action.

**6.4.4.1** Site 57 (former pumphouse 72) is located just north of the proposed vehicle parking area and washrack portion of the Proposed Action. Site 57, the Flightline Fueling System, historically consisted of four pumphouses (Pumphouses 72, 75, 76, and 77), 30 refueling pits, six defueling pits, and a jet fuel pipeline that connected all of the units. Pumphouse 72 and associated Fuel Pits were taken out of service and demolished in 1997. Contamination at the site is consistent with the Mixed Product Analytical Group, as defined in Chapter 62-770, FAC. The site is considered Low Risk and is currently under contaminated soil removal.

**6.4.4.2** TU/US-C500 is considered Low Risk and is currently approved for MNA. Groundwater contaminants of concern for TU/US-C500 include BTEX, isopropylbenzene, vinyl chloride, naphthalene, and TRPH. Soil contaminates of concern for TU/US-C500 include PAHs and TRPH.

**6.4.5 Water Resources:** Similar to the Construct Logistics Readiness Complex project, the proposed construction project would have the potential to result in minor adverse impacts on the underlying surficial aquifer and receiving surface water bodies as a result of runoff from the construction, but adherence to the practices in the existing installation Stormwater Pollution Prevention Plan (SWPPP), Hazardous Waste Management Plan, and Spill Prevention Control and Countermeasures Plan would minimize the potential for adverse effects. To reduce the adverse effects associated with groundbreaking activities, best management practices (BMPs) in accordance with MacDill's SWPPP would be implemented. BMPs for erosion and sedimentation control include the use of silt fence, hay baling stormwater inlets, and installing sod on any disturbed areas upon completion of the Repair Fire Suppression System Hangars 1, 2, and 3.

To compensate for the increased impervious surfaces, management of the additional stormwater would be required. A new stormwater retention basin within the project site would be constructed to accept the additional stormwater. The base water program manager evaluated the project and determined that a new Environmental Resource Permit from the Southwest Florida Water Management District would be needed since the Proposed Action adds approximately 138,000 ft<sup>2</sup>.

Similar to the Construct Logistics Readiness Complex, the Proposed Action is within the 100-year coastal floodplain; consequently, compliance with Executive Order (EO) 11988 is required. The vehicle parking area and washrack are solely used for storage and not permanently occupied; the lot would not be required to be elevated above the 100-year floodplain.

**6.4.6 Biological Resources:** Similar to the Construct Logistics Readiness Complex, the Proposed Action would have short-term direct minor impacts on vegetation and wildlife as a result of disturbance associated with construction. The use of BMPs to reduce soil and storm water runoff would limit the intensity, duration, and extent of impacts on vegetation. The proposed construct vehicle parking area and washrack is considered to be improved grounds that receive routine mowing. The proposed construct vehicle parking area and washrack area is not suitable habitat for most species. According to the 2012 MacDill AFB Threatened and Endangered Species Study, there are no known state or federally listed animal or plant species in the proposed area. A site survey by the MacDill AFB Natural Resources Manager in March 2015 confirmed that there are no known state or federally listed animal or plant species in the proposed area. Non-listed species in the area would be habituated to frequent disturbances and would be expected to recover quickly once construction noise and disturbances have ceased. Therefore, no adverse effects would result from project activities.

**6.4.7 Cultural Resources:** Similar to the Construct Logistics Readiness Complex project, no adverse effects on architectural or archeological resources would be expected from the construction of the Proposed Action. The Seminole Tribe of Florida and the Miccosukee Tribe of Indians of Florida were both consulted during the Environmental Impact Analysis Process for the Demolish/Consolidate Vehicle Operations Bldg 52. The Miccosukee Tribe of Indians of Florida did not express any concerns about the proposed Demolish/Consolidate Vehicle Operations Bldg 52 project. On 29 July 2015 the Seminole Tribe of Florida requested that consultation continue for the Demolish/Consolidate Vehicle Operations Bldg 52 project and on 30 September 2015, they requested that the proposed site be evaluated according to the Florida Division of Historical Resources Module 3 standards, which may involve conducting a Cultural Resource Assessment Survey. MacDill AFB completed a Cultural Resources Assessment Survey of the five acre for the Demolish/Consolidate Vehicle Operations Bldg 52 project in December 2015. No archaeological resources were found during the survey. The final Cultural Resource Assessment Survey report was submitted to the Seminole Tribe of Florida on 29 December 2016. On 3 February 2016, the Seminole Tribe of Florida had no objections to the findings of the Cultural Resources Assessment Survey. They requested to be informed in the event that any archaeological, historical, or burial resources are inadvertently discovered during construction work for the project. Correspondence between MacDill AFB and each tribe is attached. If artifacts, concentrations of shell, or unique soil conditions are discovered during construction, construction activity in the vicinity of the discovery shall cease until the MacDill Cultural Resources Manager has assessed the situation and consulted with the State Historic



Preservation Office (SHPO), Seminole Tribe of Florida, and Miccosukee Tribe of Indians of Florida, as described in MacDill's Standard Operating Procedure for Inadvertent Discovery. Therefore, no impacts to Cultural Resources are expected to result from project activities.

**6.4.8 Socioeconomics and Environmental Justice:** Similar to the Construct Logistics Readiness Complex project, short-term, negligible, beneficial effects on socioeconomic resources would be expected from the site preparation and construction of the Demolish/Consolidate Vehicle Operations Bldg 52. It is assumed that equipment and supplies necessary to complete the proposed activities would be obtained locally, and local contractors would be used. The demand for workers as part of the construction would be minor and would not outstrip the local supply of workers. The proposed preparation and construction activities would occur entirely on MacDill AFB, and it would not adversely effect on- or off-installation residents. Therefore, no environmental justice issues would be anticipated. No long-term effects on socioeconomic resources are expected to result from the proposed construction of the garage.

**6.4.9 Infrastructure:** Long-term negligible adverse effects on MacDill AFB's infrastructure would be expected. Negligible adverse effects on solid waste would be expected as a result of the minimal generation of solid waste during construction activities. Similar to the Construct Logistics Readiness Complex, the Demolish/Consolidate Vehicle Operations Bldg 52 would involve the addition of ~138,000 ft<sup>2</sup> of impervious surface, which would result in long-term, minor adverse effects on stormwater management. Stormwater runoff from the parking area would be conveyed to a new stormwater retention basin that would be constructed to handle the runoff.

**6.4.10 Hazardous Materials and Waste:** Similar to the construction of the Construct Logistics Readiness Complex, short-term, negligible, adverse effects associated with hazardous materials and waste would be expected from this project. The Proposed Action would result in a short-term increase in the use of hazardous materials and petroleum products due to construction activities. Contractors would be responsible for the management of these materials, which would be handled in accordance with the MacDill AFB Hazardous Waste Management Plan, Federal, state, and USAF regulations.

**6.4.11 Safety:** Similar to the construction of the Construct Logistics Readiness Complex, short-term minor adverse effects on safety would be expected as a result of increased risk associated with construction-type activities. Construction activities would be accomplished in accordance with Federal, state, and local regulations to minimize hazards associated with hazardous materials, wastes, and substances. Therefore, no adverse effects would result from project activities.

**6.5** Information gathered during this environmental analysis confirms that the Demolish/Consolidate Vehicle Operations Bldg 52 project would have no effects or negligible effects on the eleven resource areas evaluated.

## **7.0 COASTAL ZONE MANAGEMENT ACT COMPLIANCE:**

**7.1** The Federal Coastal Zone Management Act (CZMA) creates a state-Federal partnership to ensure the protection of coastal resources. The Federal CZMA requires each Federal agency activity, within or outside the coastal zone, which affects any land or water use or natural resources of the coastal zone, to be carried out in a manner that is consistent, to the maximum extent

practicable, with the enforceable policies of the Florida Coastal Management Program (CMP) of 1981. The Florida CMP presumes that “direct Federal activities” will directly affect the coastal zone. According to the Florida CMP, “direct Federal activities” are those that “are conducted or supported by or on behalf of a Federal agency in the exercise of its statutory responsibilities, including development projects.”

**7.2** The Federal CZMA requires Federal agencies carrying out activities subject to the Act to provide a “negative determination” to the relevant state agency. The Federal regulations implementing the Act then require the state agency to inform the Federal agency of its agreement or disagreement with the Federal agency’s negative determination. Therefore, the Proposed Action and the Alternative to the Proposed Action analyzed in this AF Form 813 require the Air Force to submit a negative determination to the relevant Florida agency and requires a response from the State of Florida of either agreement or disagreement with that determination.

**7.3** The AF Form 813, Finding of No Practicable Alternative (FONPA), and negative determination were submitted to the Florida State Clearinghouse for review (see attached). Department staff did not object to the Air Force’s negative determination and agreed that the proposed action meets the requirements of 15 CFR 930.35 (see attached).

## **8.0 EXECUTIVE ORDER 11988 – FLOODPLAIN MANAGEMENT:**

**8.1** The location of the proposed project is in the 100-year coastal floodplain.

**8.2** Executive Order 11988, Floodplain Management, seeks to avoid construction of facilities or structures within floodplains “to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains”. The project would not construct within the floodplain a facility that is occupied by personnel which would in turn jeopardize human safety, health and welfare. In addition, the project would not negatively impact the natural and beneficial value of the floodplain since storm water runoff from the Proposed Action would flow into a new stormwater management systems to compensate for any added impervious surfaces.

**8.3** Information available from the Federal Emergency Management Agency (FEMA Maps dated 2008), shows that 80 percent (4,510 acres) of MacDill is within the 100-year floodplain. Residential, industrial, and institutional land uses on the Base are within the 100-year floodplain, along with most of the commercial and aviation support areas. The runway and airfield occupy approximately 80 percent of land mass outside the floodplain on MacDill AFB and is constrained from further development for safety reasons. Overall, approximately 3.9 percent of MacDill’s land mass is outside the 100-year floodplain and outside of the runway and airfield. However, most of the 3.9% of land outside of the 100-year floodplain is not developable. That land already has buildings, roads, sidewalks, drainage swales, stormwater detention basins, etc. Overall, there is 0.20% (11.51 acres) of MacDill outside of the 100-year floodplain that is "developable".

**8.4** As discussed in **Section 5.3.2**, the Building 52 renovation and repair is not considered a substantial improvement and is not required to be elevated above the 100-year floodplain. The Proposed vehicle parking area and washrack would not be elevated above the 100-year floodplain, since they are solely used for parking and storage. The vehicle parking area and washrack are unoccupied facilities and would not result in adverse effects to human health or welfare, and would not create any additional safety risks. The wash rack facility, although subject to flooding, is not expected to sustain damage during a flood event. In addition, the project would not negatively

impact the natural and beneficial value of the floodplain since storm water runoff from the Proposed Action would flow into a new stormwater management system modified to compensate for any added impervious surfaces. Similar to the function of a floodplain, these stormwater management systems collect, store, and treat stormwater runoff from the site and allow it to slowly infiltrate back into the ground following a storm event. Therefore, although being completed in the floodplain, the Proposed Action would have insignificant impacts to the floodplain.

## **9.0 EXECUTIVE ORDER COMPLIANCE:**

**9.1** The Air Force complied with the E.O. 11988 requirement to prepare and circulate a notice containing an explanation of why the action is proposed to be located in the floodplain and the requirement to allow a brief comment period prior to taking action. Notice of the Proposed Action was published in the Tampa Tribune and on the MacDill AFB public web site on 14 April 2015. The Tampa Tribune is a local newspaper of general circulation and the advertisement was placed in a prominent section of the newspaper. The Notice advised the public that the comment period for the Proposed Action would run through 14 May 2015. The Notice advised the public that the Air Force invited public review and comment on the Draft AF Form 813, the Draft FONPA, and of the location where copies of the documents could be obtained. No comments were received during the comment period and no resources were committed or actions taken which would have an environmental impact or limit the choice of reasonable alternatives prior to expiration of the comment period.

**9.2** The environmental analysis included in this AF Form 813 and the FONPA completes the environmental impact analysis process under Air Force instructions.

# Public Notice



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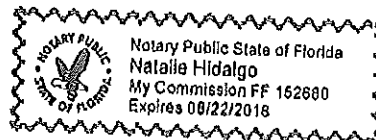
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# Pasco advisory board loses 2nd member

Insurance agent resigns because of an eligibility issue

BY LAURA KENNEDY  
Reporter

**NEWPORT NEWS** — Pasco County's charter advisory board won't hold its first meeting until next month, but it's already lost a second member.

Tim Haskins resigned Monday morning after a Wesley Chapel resident filed a grievance with the county concerning his eligi-

bility to serve. Anthony Purgell said he is voting all 15 members of the committee, which has a year to recommend a charter amendment to the board of county commissioners. That's when he learned Haskins had been elected to the position on a local-level commission but had purchased a home in Pasco County last September.

The only criteria for commission members is that they live in Pasco County for the past five years and be registered to vote. But Purgell said the appoint-

ment process "isn't perfect" and that he doesn't like the system. "I just don't like the system," he said. Haskins, a Pasco insurance agent who was nominated by Commissioner Mike Wells Jr., said he and the wife have never lived in the Pasco County property because it has been under renovation since they bought it.

They also bought a condo in New Port Richey, St. Petersburg, where he was registered to vote. "I have lived in Pasco County for the last 31 years. I still live here," Haskins said. "The county

attorney explained to me that claiming to live in Pasco County is not eligible to be a member in Pasco County, so I voluntarily resigned from the committee. I am disappointed — I was looking forward to serving."

Wells said his attorney, Jim O'Neil, would serve in Haskins' place. Last month Pasco County School Board Member Alton Grier, the only woman on the committee, resigned, citing a conflict of interest. Commissioner Kathryn Sharkey replaced her with Candice Glover.

The committee's first meeting is May 11 at the chamber of commerce in Lake Wales. Members will have until June 2016 to recommend a proposed charter that could dramatically change Pasco's form of government by implementing provisions such as single-member districts, term limits and voter recall. If they approve the charter by a two-thirds majority, commissioners will put it on the ballot during the 2016 presidential election.

Write Laura Kennedy at l.kennedy@pascofla.gov or 813-835-1555.

## Sheriff: Woman likely met boys through youth sports

She is charged with having sex with 2 minors

BY GREGORY K. ROBERTS  
Reporter

**NEWPORT NEWS** — On Tuesday, Pasco County Sheriff's Office arrested a woman charged with having sex with two teenage boys, 15 and 16, who met her through youth sports.

The woman, identified as a 21-year-old, was arrested Monday. She is charged with having sex with two minors, 15 and 16, who met her through youth sports.

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the witness a Snapchat message telling him not to tell anyone, deputies said. On April 7, Blankenship reached out to the 15-year-old victim through Snapchat before going to his home for sex before school around 7:30 a.m., authorities said.

"Her husband seemed pretty surprised," Kennedy said. Authorities said they are searching for other potential victims.

Blankenship was arrested Friday on one count of first and lascivious battery and one count of unlawful sexual activity. She was being held in the Pasco County Jail on Monday. But was set at \$100,000.

Nocco said the teenage boys attend the same high school, but he declined to say which one. "If she thought this was a one-time thing, we wouldn't be around the schools, she's an adult," Nocco said, adding that Blankenship apparently "wanted to not be a teen mom."

## Tallahassee working to clarify new foster care extension law

Focus is on disabled kids who can't live independently

BY MARLENE M. HARRIS  
The News Service of Florida

**TALLAHASSEE** — Lawmakers are working on changes to a 2-year-old law that extended foster care to children ages 18 to 21 and sought to give kids more time to prepare for independence.

It was named the Nancy C. O'Brien Children's and Community Independent Living Act for its Senate sponsor — but the law is likely to get a new title this session.

The change is aimed at clarifying which state agencies provide which services to foster kids who can't live independently because of severe disabilities and who will need some services for longer periods.

"It's an employer's best interest to get it done," he said. A Venice Republican said that work. And there's no resistance. It's just a matter of the machinery of the process."

With Disabilities' Medicaid and community-based services. The children's legal representatives could also be handling homelessness in an emergency, which could easily then be the sought-after waiver.

Children in foster care have a much higher rate of disability than the general population and are at percent to 69 percent more likely to become homeless.

Since the law passed, young adults have had the option of staying in foster care until age 21, or age 22 for those with major disabilities. That term has blurred the lines between services that are covered under the Agency for Persons With Disabilities waiver and services provided by the privatized community-based care agencies that get funding through the Department of Children & Families.

Both state agencies support the legislative fix, which takes the form of a bill to amend the law. The bill says the Agency for Persons With Disabilities "at all periods of time that are not otherwise available under the state Medicaid plan or through the child welfare system... and for an eligible individual at least 18 years old but not yet 22, the agency shall provide reasonable accom-

## Changes considered for Senate's medical pot plan

Tweaks would affect THC level, nursery eligibility

BY DAN KAM  
The News Service of Florida

**TALLAHASSEE** — The leader of the Senate's medical marijuana bill, Sen. Bill Hargis, said his medical marijuana industry has agreed to increase the level of THC in the medical pot to 10 percent, up from 8 percent.

Senate Regulated Industries Chairman Bob Bradley also has signed off on a change to make it easier for nurseries that don't meet current criteria in the law, which requires "dispensing nurseries" in places that have been in business in Florida for at least 20 years and grow a minimum of 10,000 plants.

None of the state's black farmers would be eligible under the current law. Bradley told The News Service of Florida he expects to have the bill passed by the end of the session.

It took him right now that we're likely going to delay so that we make sure that the legislative product we put is right and not quick. We don't want to be in a bind with anything," said Bradley, a Fleming Island.

Frustrated by delays in a rule-making process that has prevented the growers from moving forward in January as planned, Bradley is shepherding a measure that would create a regulatory

framework for the pot industry and broaden the law, pushed last year by parents of children who suffer from life-threatening illnesses caused by epilepsy.

Until recently, Bradley had resisted attempts to change the levels of THC in the medical pot, which is capped at 10 percent, and cannabidiol, or CBD, now required to be at least 10 percent of the mixture.

Under the new proposal, CBD is the compound in cannabis that doesn't make users feel "high" but is thought to alleviate symptoms, including spasms, for a wide range of conditions.

Bradley's office this year also would increase the types of patients who are eligible to use medical marijuana, including those with severe muscle spasms or cancer, who would be eligible for the treatment.

Under his new proposal, doctors could also order the pot for patients with AIDS, amyotrophic lateral sclerosis, multiple sclerosis, Crohn's disease, Parkinson's disease, paraplegia, quadriplegia or terminal illness. The measure also could be ordered to alleviate symptoms of the diseases.

Officials of the proposed amendment that the THC levels in the law are too low to aid the additional patients in Bradley's bill (SB 7025).

Supporters of a broader bill have urged Bradley and others to raise the THC level to 10 percent or 15 percent under the minimum CBD level.

"It's too early to tell, but there are certainly numbers that are being put out there."

considered," Bradley said Monday. Last month, leaders of the Florida Black Farmers and Agriculturalists Association told a Senate panel the current law's exclusion of black farmers targeted red wounds caused by discrimination in lending practices imposed by the federal government's disaster aid that led to two class-action lawsuits. The lawsuits, known as "Big Red" and "Big Red II," were settled by a federal judge in 2011, but many of the plaintiffs have yet to receive their portion of the \$1.2 billion settlement.

Even the changes Bradley is considering won't likely satisfy proponents of a medical-marijuana bill that failed in November to capture the 60 percent approval from voters requested for passage. A campaign known as "Vote for the Cure" is working to get a similar measure in next year's ballot.

"From a perspective of where I am trying to get something passed that benefits the most number of people, I don't think 15 percent would be acceptable to us. It doesn't matter what percent they put on it if the list of diseases is short and as small as it currently is and if they don't have the symptoms, particularly, chronic pain," said Gov. Rick Scott, campaign manager for "Vote for the Cure."

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(If available or required)

Figures;  
ERP Information;  
Tribal Consultation;  
Other





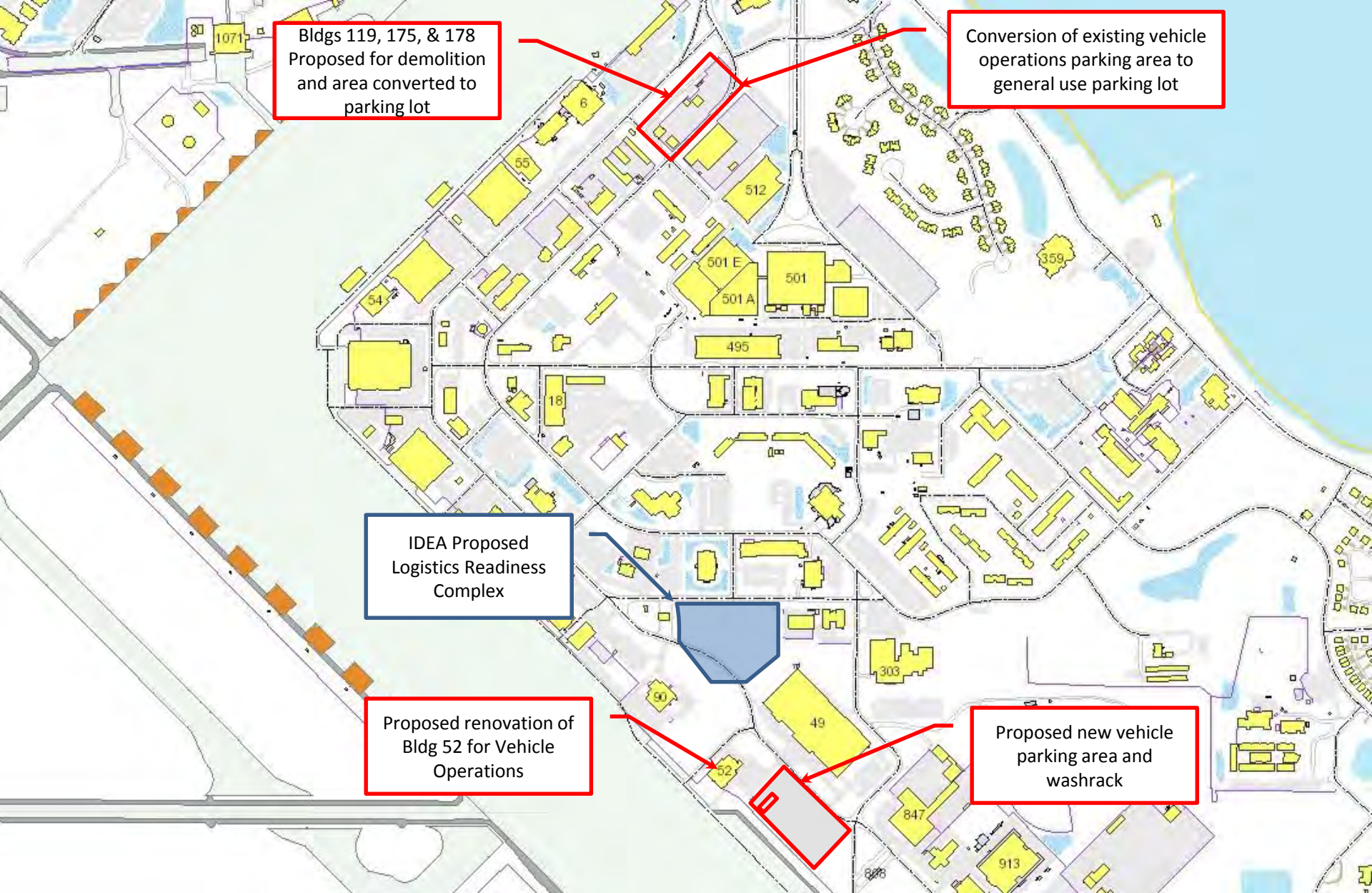


Figure 1 – General location of the Proposed new 6 LRS vehicle operations area and the location of the buildings proposed for demolition



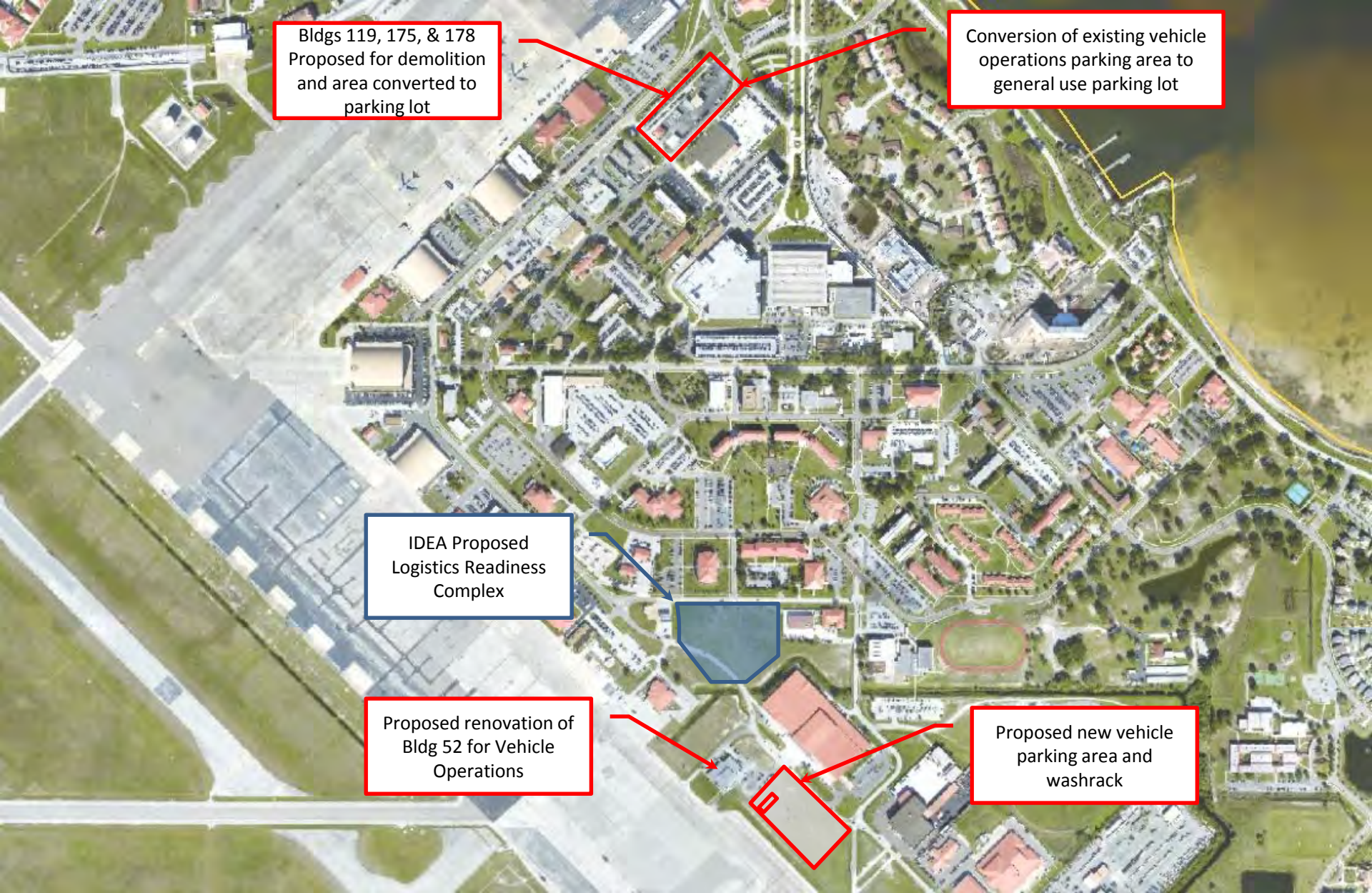


Figure 2 – Aerial view of the general location of the Proposed new 6 LRS vehicle operations area and the location of the buildings proposed for demolition



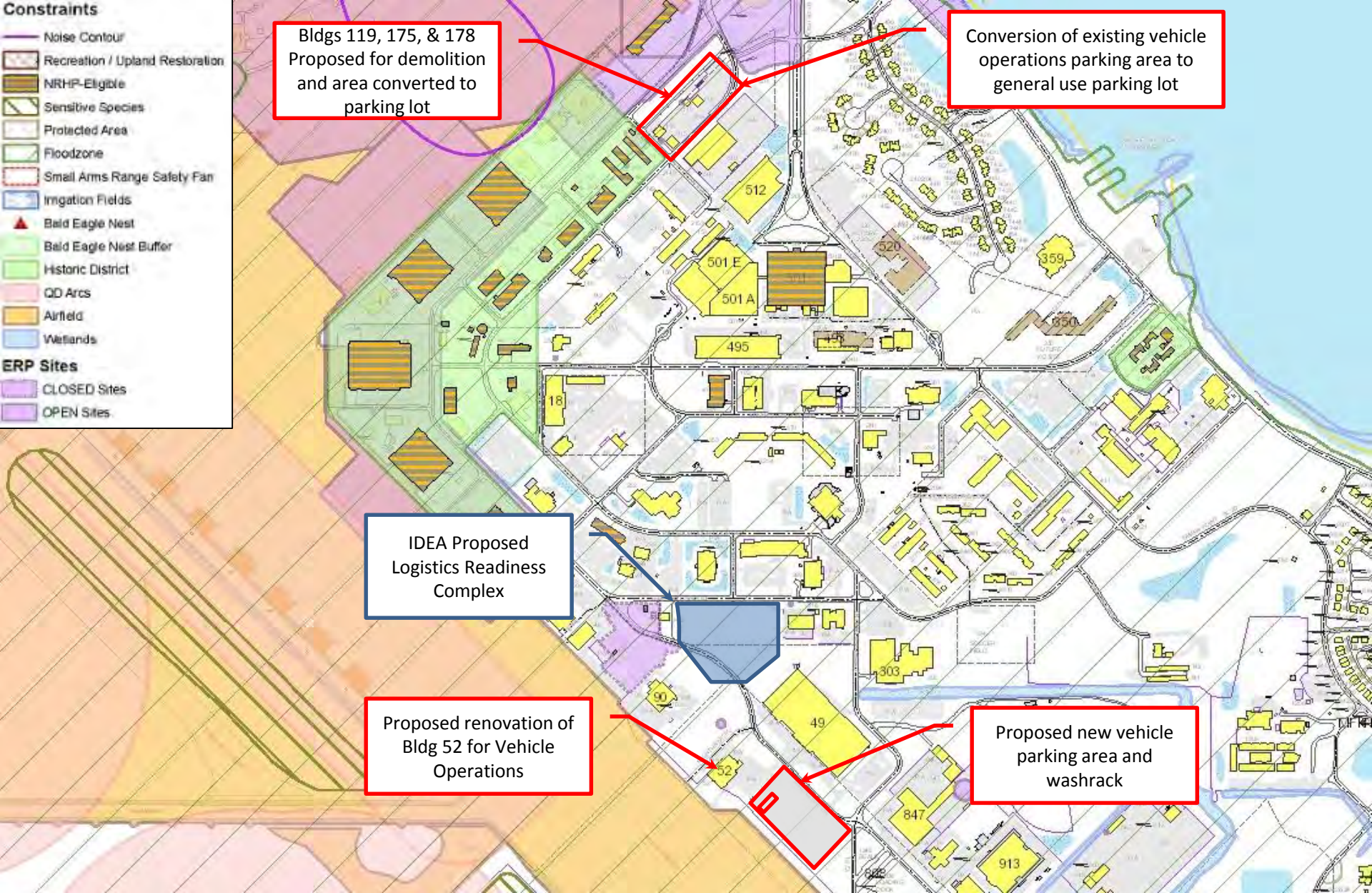


Figure 3 – Map of the general location of the Proposed new 6 LRS vehicle operations area and the location of the buildings proposed for demolition overlain against existing base constraints

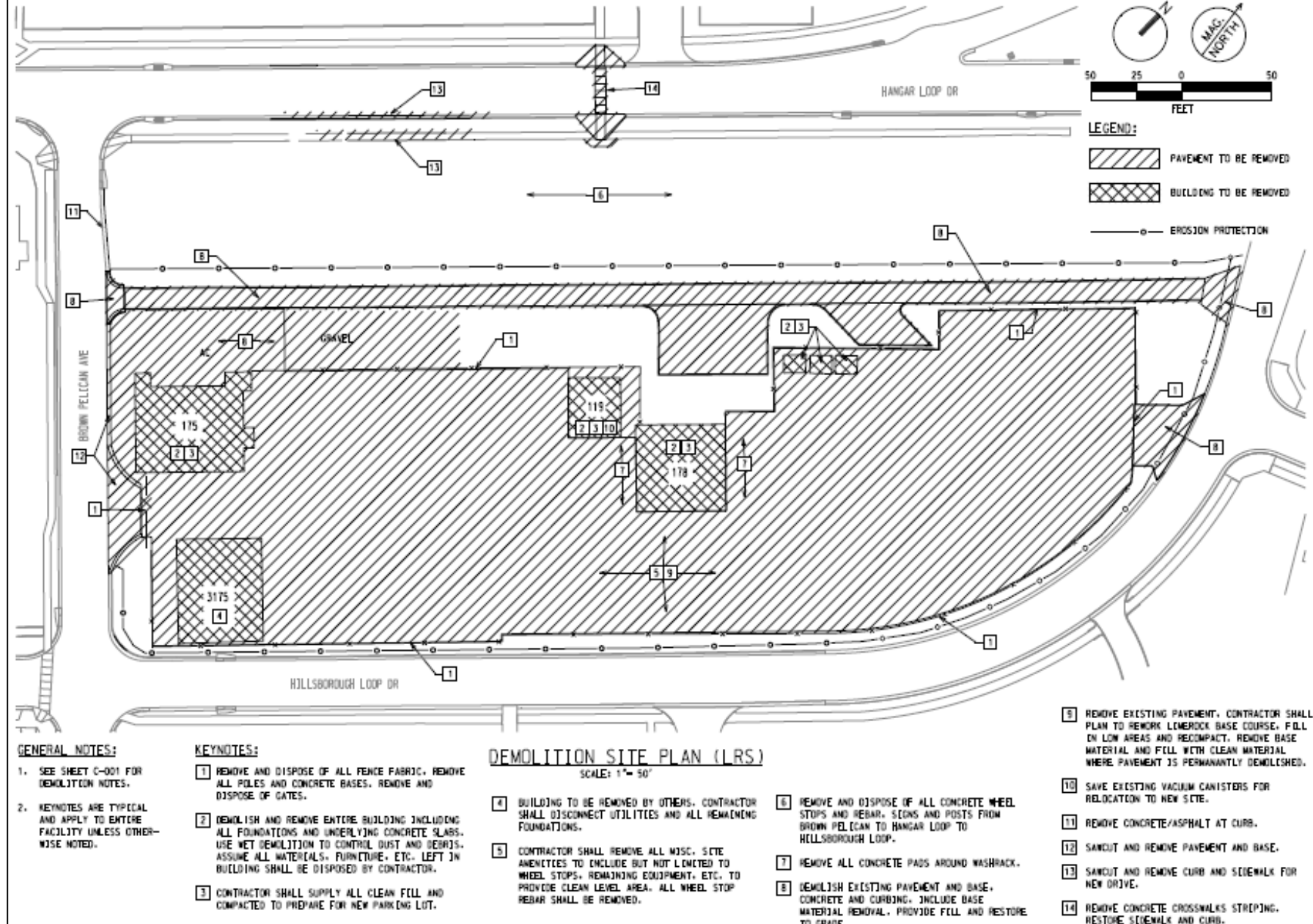


Figure 4 – Existing vehicle operations area demolition site plan





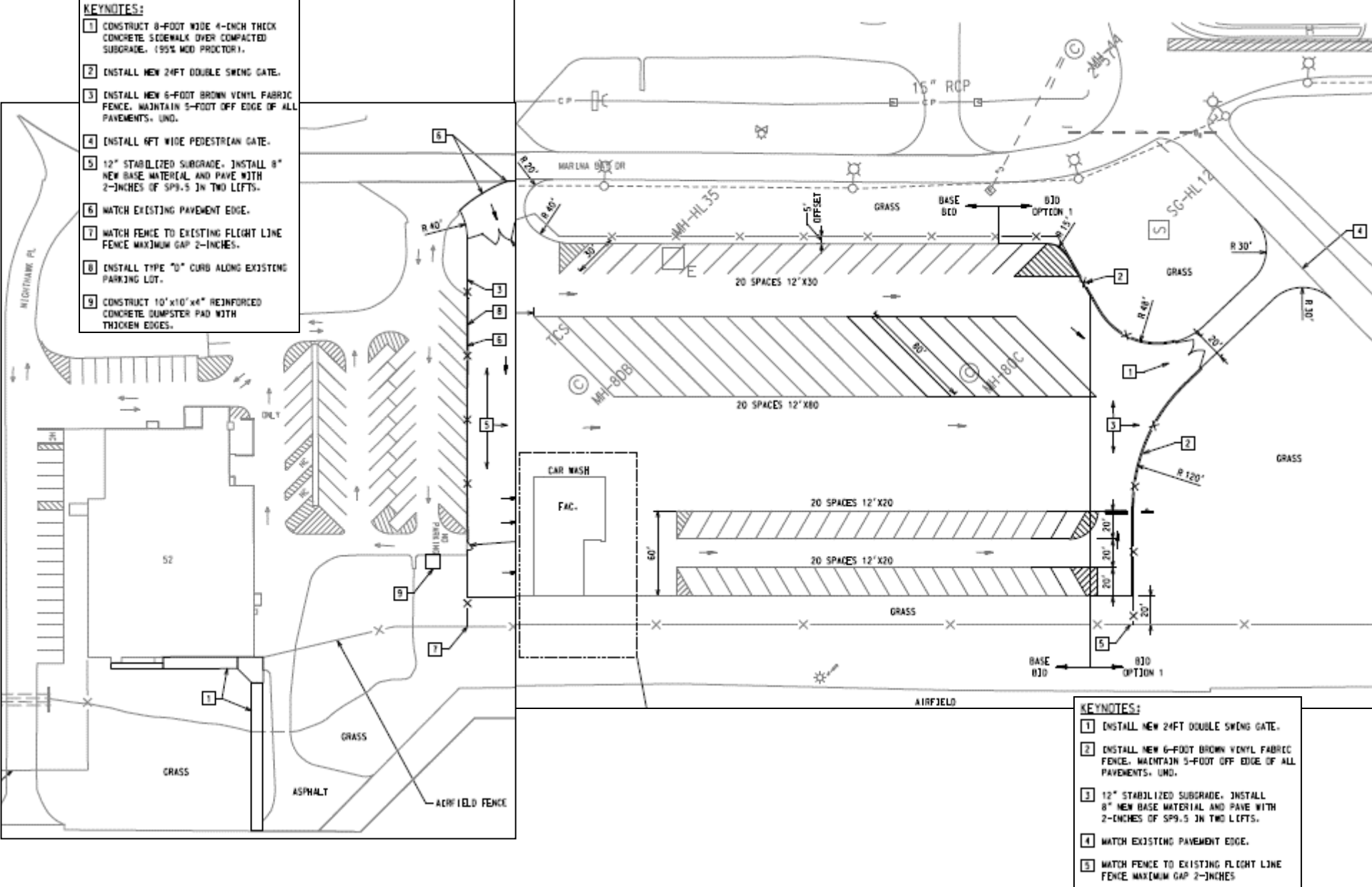


Figure 6 – New vehicle operations area site plan (Note: Keynotes on left side correspond to the plan on the left and keynotes on the right side correspond to the plan on the right)

# **FEDERAL AGENCY COASTAL ZONE MANAGEMENT ACT (CZMA) NEGATIVE DETERMINATION**

## **Introduction**

This document provides the State of Florida with the U.S. Air Force's Negative Determination under CZMA Section 307 and 15 CFR Part 930.35. The information in this Negative Determination is provided pursuant to 15 CFR Section 930.35 (b).

Pursuant to Section 307 of the Coastal Zone Management Act, 16 U.S.C. § 1456, as amended, its implementing regulations 15 CFR 930.35 this is a Federal Negative Determination for activities described below.

## **Proposed Federal agency action:**

The purpose of the Proposed Action is to renovate Building 52 for the 6th Logistics Readiness Squadron (6 LRS) Vehicle Operations Flight, construct new vehicle parking area and washrack, and demolish existing inadequate vehicle operations facilities. The Proposed Action consists of four components: 1) Interior renovation of Building 52; 2) construction of a new ~138,000 ft<sup>2</sup> vehicle parking area and a ~4,200 ft<sup>2</sup> wash rack within the parking area; 3) demolition of three vehicle operations facilities (Building 119 {vehicle detailing shed}, Building 175 {administrative facility}, Building 178 {vehicle washrack}), and removal of leased modular facility and; 4) conversion of current vehicle operations area to a parking lot. The Proposed Action is located within the 100-year floodplain.

## **Federal Review**

After review of the Florida Coastal Management Program and its enforceable policies, the U.S. Air Force has made a negative determination that this activity will have any affect on the state of Florida's coastal zone or its resources.



Figure 1 – Vicinity Map





**Figure 2 – Location Map of Proposed Action**



### Florida Coastal Management Program Consistency Review

| <b>Statute</b>                                                                                        | <b>Consistency</b>                                                                                                                                                                                                                                                                                                                                                                    | <b>Scope</b>                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chapter 161 <i>Beach and Shore Preservation</i>                                                       | The proposed project would not adversely affect beach and shore management, specifically as it pertains to: <ul style="list-style-type: none"> <li>▪ The Coastal Construction Permit Program.</li> <li>▪ The Coastal Construction Control Line (CCCL) Permit Program.</li> <li>▪ The Coastal Zone Protection Program. All land activities would occur on federal property.</li> </ul> | Authorizes the Bureau of Beaches and Coastal Systems within DEP to regulate construction on or seaward of the states' beaches.                                                                         |
| Chapter 163, Part II <i>Growth Policy; County and Municipal Planning; Land Development Regulation</i> | All activities would occur on federal property.                                                                                                                                                                                                                                                                                                                                       | Requires local governments to prepare, adopt, and implement comprehensive plans that encourage the most appropriate use of land and natural resources in a manner consistent with the public interest. |
| Chapter 186 <i>State and Regional Planning</i>                                                        | All activities would occur on federal property.                                                                                                                                                                                                                                                                                                                                       | Details state-level planning requirements. Requires the development of special statewide plans governing water use, land development, and transportation.                                              |
| Chapter 252 <i>Emergency Management</i>                                                               | The proposed action would not increase the state's vulnerability to natural disasters. Emergency response and evacuation procedures would not be impacted by the proposed action.                                                                                                                                                                                                     | Provides for planning and implementation of the state's response to, efforts to recover from, and the mitigation of natural and manmade disasters.                                                     |
| Chapter 253 <i>State Lands</i>                                                                        | All activities would occur on federal property.                                                                                                                                                                                                                                                                                                                                       | Addresses the state's administration of public lands and property of this state and provides direction regarding the acquisition, disposal, and management of all state lands.                         |
| Chapter 258 <i>State Parks and Preserves</i>                                                          | Recreational areas and aquatic preserves would not be affected by the proposed action.                                                                                                                                                                                                                                                                                                | Addresses administration and management of state parks and preserves.                                                                                                                                  |
| Chapter 259 <i>Land Acquisition for Conservation or Recreation</i>                                    | All activities would occur on federal property.                                                                                                                                                                                                                                                                                                                                       | Authorizes acquisition of environmentally endangered lands and outdoor recreation lands.                                                                                                               |

| <b>Statute</b>                                                     | <b>Consistency</b>                                                                                                                                                                                                                                                                                                                                                                                                | <b>Scope</b>                                                                                                                  |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Chapter 260<br><i>Florida Greenways and Trails Act</i>             | Florida Greenways and Trails would not be affected. All activities would occur on federal property.                                                                                                                                                                                                                                                                                                               | Authorizes acquisition of land to create a recreational trails system and to facilitate management of the system.             |
| Chapter 267 <i>Historical Resources</i>                            | The Air Force and the Florida State Historic Preservation Officer have determined that MacDill has two areas with buildings potentially eligible for the National Register of Historic Places. The Proposed Action is located outside of the MacDill Field Historic District and the Staff Officers Historic District. Consultations between the Air Force and State Historic Preservation Officer was completed. | Addresses management and preservation of the state's archaeological and historical resources.                                 |
| Chapter 288 <i>Commercial Development and Capital Improvements</i> | The proposed action would occur on federal property. The proposed action is not anticipated to have any effect on future business opportunities on state lands, or the promotion of tourism in the region.                                                                                                                                                                                                        | Provides the framework for promoting and developing the general business, trade, and tourism components of the state economy. |
| Chapter 334 <i>Transportation Administration</i>                   | The proposed project would not have an impact on transportation.                                                                                                                                                                                                                                                                                                                                                  | Addresses the state's policy concerning transportation administration.                                                        |
| Chapter 339 <i>Transportation Finance and Planning</i>             | The proposed project would have no effect on the finance and planning needs of the state's transportation system.                                                                                                                                                                                                                                                                                                 | Addresses the finance and planning needs of the state's transportation system.                                                |
| Chapter 373 <i>Water Resources</i>                                 | Wetlands would not be disturbed, as there are no wetlands within the footprint of the proposed action. New impervious surface would be permitted through the South West Florida Water Management District, if needed. The proposed action would not significantly impact the floodplain                                                                                                                           | Addresses the state's policy concerning water resources.                                                                      |

| <b>Statute</b>                                                                                     | <b>Consistency</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Scope</b>                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chapter 375 <i>Multipurpose Outdoor Recreation; Land Acquisition, Management, and Conservation</i> | Opportunities for recreation on state lands would not be affected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Develops comprehensive multipurpose outdoor recreation plan to document recreational supply and demand, describe current recreational opportunities, estimate need for additional recreational opportunities, and propose means to meet the identified needs. |
| Chapter 376 <i>Pollutant Discharge Prevention and Removal</i>                                      | The proposed action does not involve the transfer, storage, or transportation of pollutants.                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Regulates transfer, storage, and transportation of pollutants, and cleanup of pollutant discharges.                                                                                                                                                           |
| Chapter 377 <i>Energy Resources</i>                                                                | Energy resource production, including oil and gas, and the transportation of oil and gas, would not be affected by the proposed action.                                                                                                                                                                                                                                                                                                                                                                                                                  | Addresses regulation, planning, and development of energy resources of the state.                                                                                                                                                                             |
| Chapter 379 <i>Fish and Wildlife Conservation</i>                                                  | There would be no impact to wildlife resources. No threatened or endangered species occur at or near the site of the proposed action. The proposed action would occur on already developed urban landscape.                                                                                                                                                                                                                                                                                                                                              | Addresses the management of the wildlife resources of the state.                                                                                                                                                                                              |
| Chapter 380 <i>Land and Water Management</i>                                                       | The proposed action would occur on federally owned lands. Under the proposed action, development of state lands with regional (i.e. more than one county) impacts would not occur. Areas of Critical State Concern or areas with approved state resource management plans such as the Northwest Florida Coast would not be affected. Changes to coastal infrastructure such as bridge construction, capacity increases of existing coastal infrastructure, or use of state funds for infrastructure planning, designing or construction would not occur. | Establishes land and water management policies to guide and coordinate local decisions relating to growth and development.                                                                                                                                    |

| <b>Statute</b>                                         | <b>Consistency</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Scope</b>                                                                                                        |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Chapter 381 <i>Public Health, General Provisions</i>   | The proposed action does not involve the construction of an on-site sewage treatment and disposal system. If new connections to public drinking water system are necessary, coordination with MacDill's Environmental Flight and Bioenvironmental Engineering Flight prior to construction would be required to ensure proper State of Florida permitting requirements are met.                                                                                                                                        | Establishes public policy concerning the state's public health system.                                              |
| Chapter 388 <i>Mosquito Control</i>                    | The proposed action would not affect mosquito control efforts.                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Addresses mosquito control effort in the state.                                                                     |
| Chapter 403 <i>Environmental Control</i>               | The proposed action would not affect ecological systems and water quality of state waters. All reasonable precautions will be taken to minimize fugitive particulate (dust) emissions during any ground disturbing/construction activities IAW Chapter 62-296 Florida Administrative Code (F.A.C. Rule 62-296).                                                                                                                                                                                                        | Establishes public policy concerning environmental control in the state.                                            |
| Chapter 553 <i>Building and Construction Standards</i> | All activities would occur on federal property. The demolition and consolidation of vehicle operations will meet the Department of Defense and Air Force Unified Facilities Criteria.                                                                                                                                                                                                                                                                                                                                  | Establishes the Florida Building Code and associated applications, permits, and inspections.                        |
| Chapter 582 <i>Soil and Water Conservation</i>         | Impacts to soils would not be significant. Construction of the stormwater retention basin should not breach the soil/groundwater interface. Standard erosion control measures will be implemented during construction. If the project will "disturb" over one acre of soil and discharge storm water, then a "Generic Permit for Stormwater Discharge from Large and Small Construction Activities under 62-621.300(4)(a) FAC will be required. The proposed action is located within the 100-year coastal floodplain. | Provides for the control and prevention of soil erosion, and for the prevention of floodwater and sediment damages. |
| Chapter 597 <i>Aquaculture</i>                         | The proposed action would not affect aquaculture efforts.                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Enhance the growth of aquaculture, while protecting Florida's environment.                                          |

**From:** [Stahl, Chris](#)  
**To:** [KIRKPATRICK, JASON W CTR USAF AMC 6 CES/CEIE](#)  
**Subject:** FW: State Clearance Letter for FL201604087588C - Demolish/Consolidate Vehicle Operations Building 52  
**Date:** Friday, April 8, 2016 3:35:42 PM

---

**From:** Stahl, Chris  
**Sent:** Friday, April 08, 2016 3:29 PM  
**To:** 'KIRKPATRICK, JASON W CTR USAF AMC 6 CES/CEIE' <jason.kirkpatrick.2.ctr@us.af.mil>  
**Cc:** FLACH, MICHAEL G GS-12 USAF AMC 6 CES/CEIE <michael.flach@us.af.mil>; HERR, WILLIAM E CTR USAF AMC 6 CES/CEIE <william.herr.ctr@us.af.mil>; RIDER, ANDREW W CTR USAF AMC 6 CES/CEP <andrew.rider.ctr@us.af.mil>  
**Subject:** State Clearance Letter for FL201604087588C - Demolish/Consolidate Vehicle Operations Building 52

Mr. Jason W. Kirkpatrick -6 CES/CEVN  
7621 Hillsborough Loop Drive  
MacDill AFB, Florida 33621-5207

RE: Department of the Air Force - Negative Determination - Demolish/Consolidate Vehicle Operations Building 52 at MacDill Air Force Base - Hillsborough County, Florida.  
SAI # FL201604087588C

Dear Jason:

Florida State Clearinghouse staff has reviewed the proposal under the following authorities: Presidential Executive Order 12372; § 403.061(42), *Florida Statutes*; the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, as amended.

The proposed construction project will require an Environmental Resource Permit from the Southwest Florida Water Management District (SWFWMD). The applicant should continue to work with permitting staff at the SWFWMD to resolve any issues.

Based on the information contained in the submittal and minimal project impacts, the state has no objections to allocation of federal action and it is consistent with the Florida Coastal Management Program (FCMP). The state's continued concurrence will be based on the activity's compliance with FCMP authorities, including federal and state monitoring of the activity to ensure its continued conformance, and the adequate resolution of any issues identified during subsequent regulatory reviews. The state's final concurrence of the project's consistency with the FCMP will be determined during any environmental permitting process, in accordance with Section 373.428, Florida Statutes.

Thank you for the opportunity to review the proposed plan. If you have any questions or need further assistance, please don't hesitate to contact me at (850) 717-9076 or [Chris.Stahl@dep.state.fl.us](mailto:Chris.Stahl@dep.state.fl.us).

Yours sincerely,

*Chris Stahl*

Chris Stahl, Coordinator  
Florida State Clearinghouse  
Florida Department of Environmental Protection  
3900 Commonwealth Blvd, M.S. 47  
Tallahassee, FL 32399-3000  
ph. (850) 245-2169  
fax (850) 245-2190  
[Chris.Stahl@dep.state.fl.us](mailto:Chris.Stahl@dep.state.fl.us)





DEPARTMENT OF THE AIR FORCE  
6TH AIR MOBILITY WING (AMC)  
MACDILL AIR FORCE BASE, FLORIDA

Colonel Daniel H. Tulley  
6<sup>th</sup> Air Mobility Wing Commander  
8208 Hangar Loop Drive, Suite 1  
MacDill Air Force Base, Florida 33621-5407

JUN 23 2015

Mr. Fred Dayhoff  
Miccosukee Tribe of Indians of Florida  
HC 61  
SR BOX 68, Old Loop Road  
Ochopee, FL 34141

Dear Mr. Dayhoff;

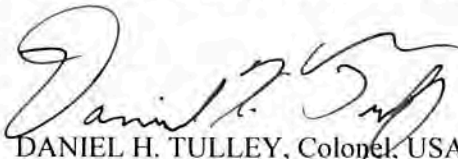
The existing Vehicle Operations facility at MacDill AFB is poorly located and does not meet Air Force standards. The existing buildings are deteriorated and the facility is situated in an area of high traffic congestion which limits movement of the fleet. MacDill AFB plans to demolish the existing Vehicle Operations facility and construct a new facility that meets current Air Force standards and is located in a more compatible area of the base.

The project would demolish several facilities (Buildings 119, 175, and 178) at the existing Vehicle Operations compound and would renovate Building 52 near the South Flight Apron to serve as the new Vehicle Operations building. The project would also construct a new 138,000 square foot vehicle parking area and a new wash rack. The location for both the existing and the proposed future Vehicle Operations facility is presented in Figure 1.

There are no known archeological sites within or adjacent to either the existing or the proposed Vehicle Operations facility. The closest known archeological sites in the vicinity of the proposed project are presented in Figure 2 and are each more than a mile away from either of the two proposed project areas.

In accordance with Executive Order 13175 and Section 106 of the NHPA (36 CFR Sections 800.2, 800.3, and 800.4), the Air Force would like to initiate government-to-government consultation regarding relocation of the Vehicle Operations Facility. The Air Force desires to discuss the proposal in detail with you so that we may understand and consider any comments, concerns, and suggestions you may have.

Please let us know when you would like to meet to discuss the proposal and your expectations on how we should proceed with consultation. Do not hesitate to call me at (813) 828-4444 to arrange dates and times for consultation.

  
DANIEL H. TULLEY, Colonel, USAF  
Commander

Attachment

1. Figures 1 & 2: Location of Proposed Vehicle Operations Facility project work and know archeological site areas

**RAPID GLOBAL MOBILITY...UNMATCHED INSTALLATION SUPPORT!**

## ATTACHMENT 1

Figure 1: Location of Construction Work for Relocation of Vehicle Operations Facility

Figure 2: General Location of Proposed Project Work in Relation to Closest Archeological Sites



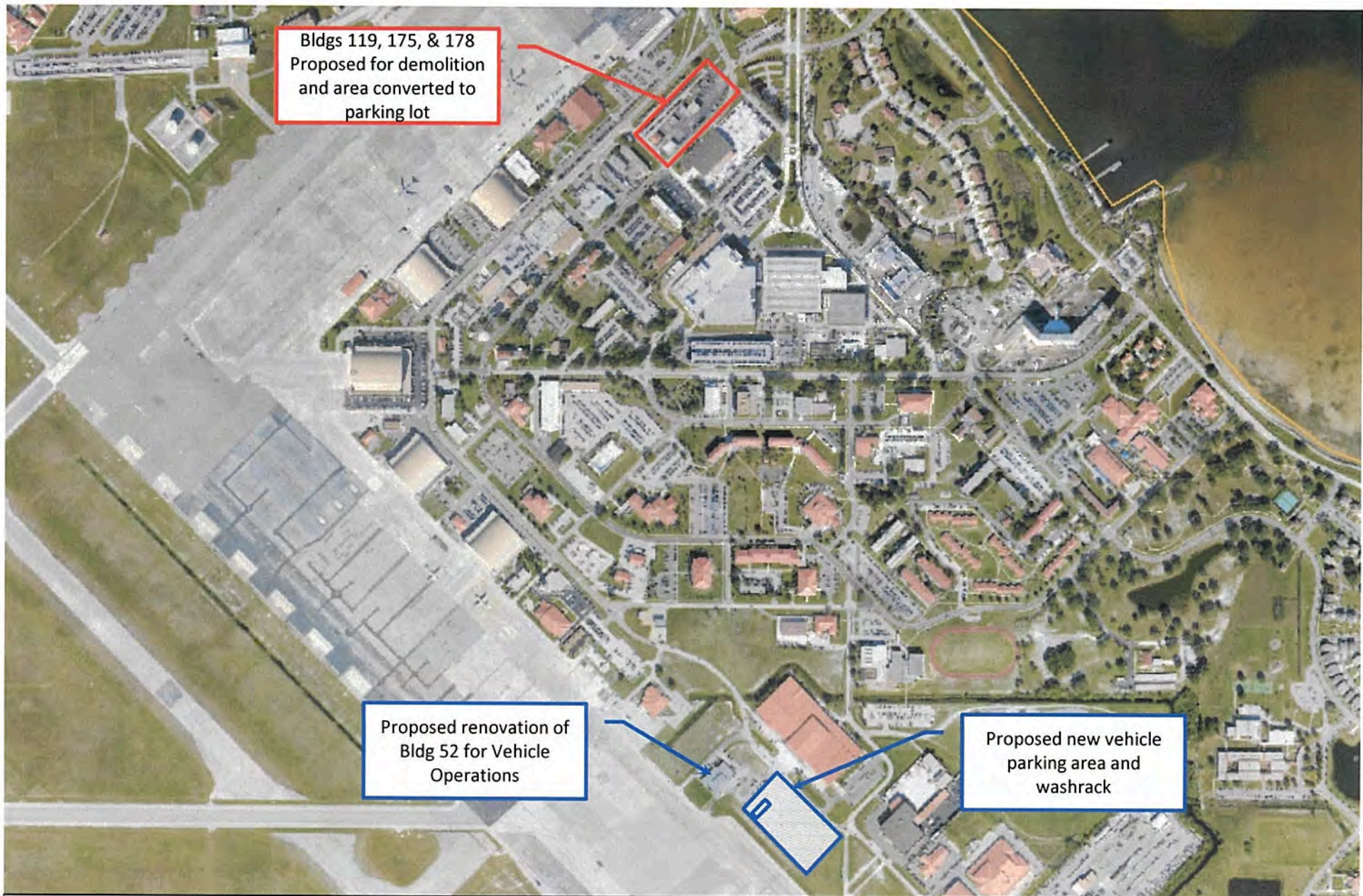


Figure 1 – Aerial view showing the general areas of demolition and construction work for the proposed new Vehicle Operations facility. The project would demolish the existing buildings within the current Vehicle Operations area and would leave the site as an asphalt parking lot. Building 52 would be renovated to serve as the new Vehicle Operations facility and a 138,000 square foot parking lot and wash rack would be constructed near Building 52 to support the Vehicle Operations function.





Figure 2 - Aerial view of MacDill Air Force Base showing the areas of proposed project work associated with the demolition and relocation of the Vehicle Operations Facility. Also shown are the general areas of the closest known archeological sites on base which are over one mile away.





MacDill Air Force Base Environmental  
6 CES/CEV  
7621 Hillsborough Loop Dr.  
MacDill AFB, FL 33621  
<https://cs.eis.af.mil/a7cportal/eDASH/AMC/macdill/default.aspx>

MEMORANDUM FOR RECORD

JUL 22 2015

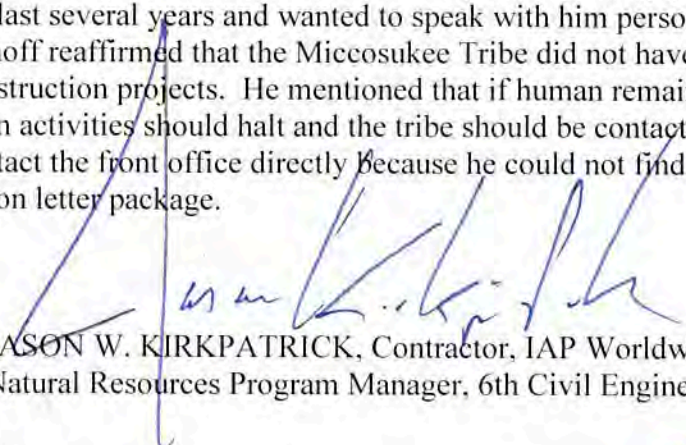
FROM: 6 CES/CEVN

SUBJECT: Consultation with Miccosukee Tribe of Indians Regarding 11 Proposed Construction Projects at MacDill AFB

1. A package containing individual consultation letters for 11 upcoming construction projects at MacDill Air Force Base was sent to the Miccosukee Tribe of Indians. The consultation letters, each dated 23 June 2015, were received by Mr. Fred Dayhoff, the Section 106 Native American Grave Protection and Repatriation Act (NAGPRA) representative for the Miccosukee Tribe of Indians. Mr. Dayhoff contacted the 6 AMW front office on 20 July 2015 and talked with Lt. Machado (6 AMW/CCE) to let him know that the Miccosukee Tribe of Indians had no input on the 11 construction projects. The 11 projects included in the consultation package are listed below:

- U.S. Army Reserve Helicopter Unit Bed Down, planned for FY18
- Maintenance Dredging of the Marina Channel and Basins
- Clearing and Grading of Wooded Area to Remove Obstructions in Airfield Clear Zone
- Construct an Active Shooter Training Facility
- Construct a Fire Suppression System in Hangars 1 thru 3
- Demolish and Relocate Vehicle Operations Facility to Building 52
- Construct New Sidewalks around Central Command Facility
- Construct Drug Demand Reduction Facility
- Construct Addition and Renovate Building 1066 for New Pass & ID Facility
- Aerial Application of Pesticide for Mosquito Control and Vegetation Maintenance
- Construct a New Warehouse District

2. On 22 July 2015, I made a follow-up phone call to Mr. Dayhoff to double check that he was satisfied with the consultation process. I have been Mr. Dayhoff's primary point of contact from MacDill AFB over the last several years and wanted to speak with him personally. During our conversation, Mr. Dayhoff reaffirmed that the Miccosukee Tribe did not have any concerns about the proposed construction projects. He mentioned that if human remains are found during excavation, construction activities should halt and the tribe should be contacted. He also commented that he contact the front office directly because he could not find contact information for me in the consultation letter package.

  
JASON W. KIRKPATRICK, Contractor, IAP Worldwide Services Inc.  
Natural Resources Program Manager, 6th Civil Engineer Squadron



*Commit to Serve, Commit to Conserve*





DEPARTMENT OF THE AIR FORCE  
6TH AIR MOBILITY WING (AMC)  
MACDILL AIR FORCE BASE, FLORIDA

Colonel Daniel H. Tulley  
6<sup>th</sup> Air Mobility Wing Commander  
8208 Hangar Loop Drive, Suite 1  
MacDill Air Force Base, Florida 33621-5407

JUN 23 2015

Dr. Paul Backhouse  
Seminole Tribe of Florida  
30290 Josie Billie Hwy, PMB 1004  
Clewiston, FL 33440

Dear Dr. Backhouse;

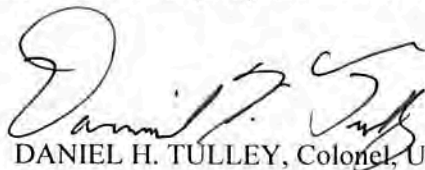
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There are no known archeological sites within or adjacent to either the existing or the proposed Vehicle Operations facility. The closest known archeological sites in the vicinity of the proposed project are presented in Figure 2 and are each more than a mile away from either of the two proposed project areas.

In accordance with Executive Order 13175 and Section 106 of the NHPA (36 CFR Sections 800.2, 800.3, and 800.4), the Air Force would like to initiate government-to-government consultation regarding relocation of the Vehicle Operations Facility. The Air Force desires to discuss the proposal in detail with you so that we may understand and consider any comments, concerns, and suggestions you may have.

Please let us know when you would like to meet to discuss the proposal and your expectations on how we should proceed with consultation. Do not hesitate to call me at (813) 828-4444 to arrange dates and times for consultation.



DANIEL H. TULLEY, Colonel, USAF  
Commander

Attachment

1. Figures 1 & 2: Location of Proposed Vehicle Operations Facility project work and know archeological site areas.

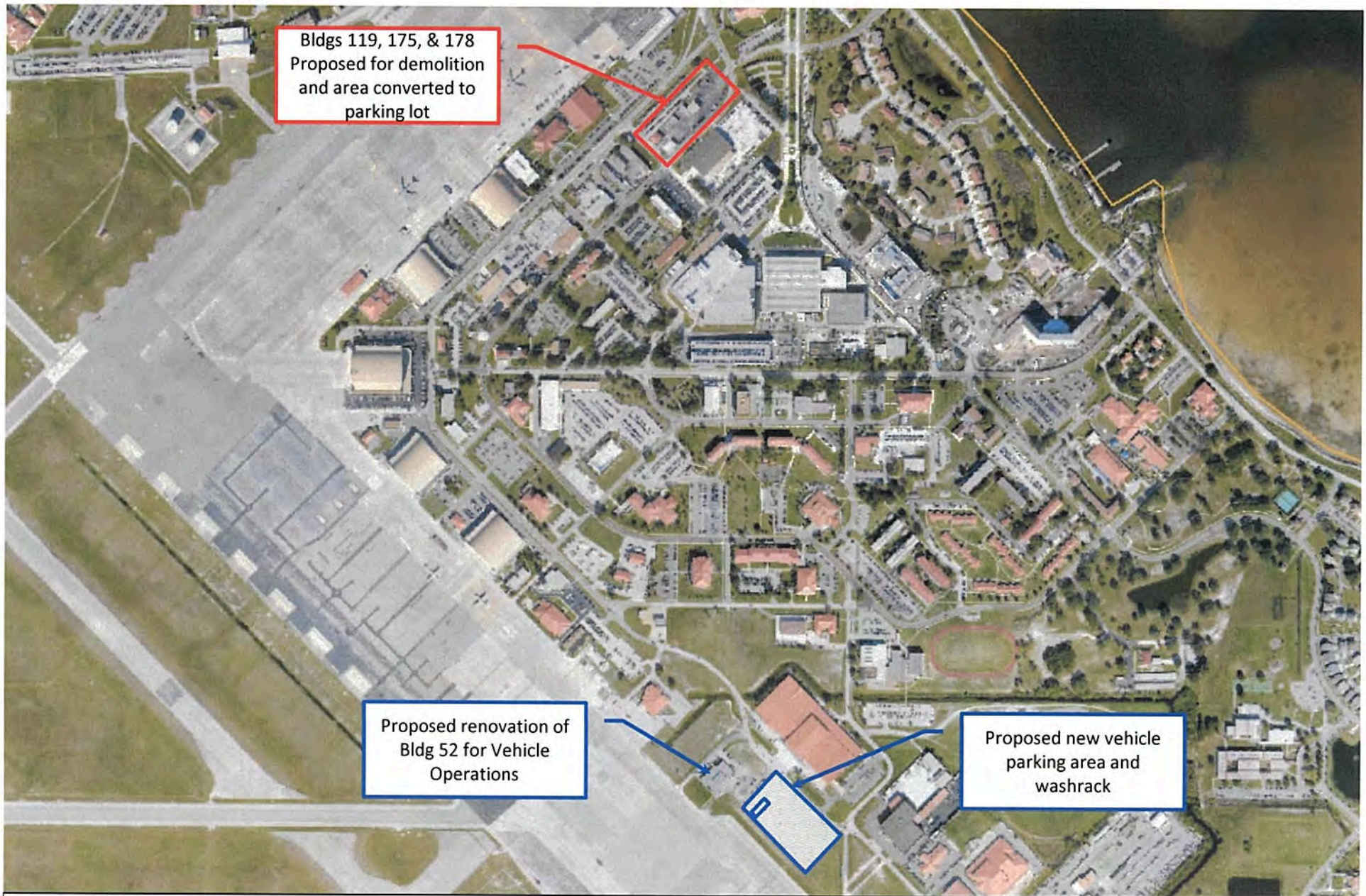
**RAPID GLOBAL MOBILITY...UNMATCHED INSTALLATION SUPPORT!**

## ATTACHMENT 1

Figure 1: Location of Construction Work for Relocation of Vehicle Operations Facility

Figure 2: General Location of Proposed Project Work in Relation to Closest Archeological Sites





Bldgs 119, 175, & 178  
Proposed for demolition  
and area converted to  
parking lot

Proposed renovation of  
Bldg 52 for Vehicle  
Operations

Proposed new vehicle  
parking area and  
washrack

Figure 1 – Aerial view showing the general areas of demolition and construction work for the proposed new Vehicle Operations facility. The project would demolish the existing buildings within the current Vehicle Operations area and would leave the site as an asphalt parking lot. Building 52 would be renovated to serve as the new Vehicle Operations facility and a 138,000 square foot parking lot and wash rack would be constructed near Building 52 to support the Vehicle Operations function.





Figure 2 - Aerial view of MacDill Air Force Base showing the areas of proposed project work associated with the demolition and relocation of the Vehicle Operations Facility. Also shown are the general areas of the closest known archeological sites on base which are over one mile away.



SEMINOLE TRIBE OF FLORIDA  
TRIBAL HISTORIC PRESERVATION OFFICE  
AH-TAH-THI-KI MUSEUM

---

TRIBAL HISTORIC  
PRESERVATION OFFICE  
SEMINOLE TRIBE OF FLORIDA  
AH-TAH-THI-KI MUSEUM  
30290 JOSIE BILLIE HWY  
PMB 1004  
CLEWISTON, FL 33440  
PHONE: (863) 983-6549  
FAX: (863) 902-1117



TRIBAL OFFICERS  
CHAIRMAN  
JAMES E. BILLIE  
VICE CHAIRMAN  
MITCHELL CYPRESS  
SECRETARY  
LAVONNE KIPPENBERGER  
TREASURER  
PETER HAHN

July 29, 2015

Mr. Jason Kirkpatrick  
Contractor, IAP Worldwide Services Inc.  
6th Civil Engineer Squadron  
7621 Hillsborough Loop Dr.  
MacDill AFB, FL 33621  
(813) 695-3206  
jason.kirkpatrick.2.ctr@us.af.mil

**Subject:** Consultation Requests: 11 Letters Regarding Upcoming Projects at MacDill AFB.  
**THPO#:** 0028679 - 0028690

The Tribal Historic Preservation Office of the Seminole Tribe of Florida (STOF-THPO) thanks you for consulting with the Tribe regarding the 11 Upcoming Projects at MacDill AFB. We appreciate your efforts to implement the new Air Force cultural resource regulations regarding Tribal consultation and compliance with Section 106/110 of the National Historic Preservation Act (NHPA). The THPO has reviewed each of the 11 proposed undertakings and would like to submit the following comments. In addition to project-specific comments, the final comment is intended to provide a framework for evaluating actions/situations that we feel warrant Tribal consultation under Section 106 of NHPA and other applicable legislation (i.e. NEPA, NAGPRA):

- 1) The STOF-THPO has **no objection** the following undertakings and does not wish to continue consultation at this time. Please contact the STOF-THPO if any historical, archaeological, or burial resources are inadvertently encountered during the construction process.
  - o Maintenance Dredging of the Marina Channel and Basin
  - o Construct a Fire Suppression System in Hangars 1 thru 3
  - o Construct New Sidewalks around Central Command Facility
  - o Construct Drug Demand Reduction Facility
  - o Construct Addition and Renovate Building 1066 for New Pass & ID Facility
  - o Aerial Application of Pesticide for Mosquito Control and Vegetation Maintenance
- 2) The STOF-THPO respectfully requests that **consultation continue** for the following projects. Given the information provided, we recommend that a Cultural Resource Assessment Survey be performed within these APEs unless it can be demonstrated that the APEs have been extensively disturbed by prior activities:
  - o U.S. Army Reserve Helicopter Unit Bed Down (Primary Location only)
  - o Construct an Active Shooter Training Facility
  - o Clearing and Grading of Wooded Area to Remove Obstructions in Airfield Clear Zone



- Demolish and Relocate Vehicle Operations Facility to Building 52 (New parking lot construction only)
  - Construct a New Warehouse District
- 3) The STOF-THPO appreciates your invitation to meet with THPO representatives and Tribal leadership to discuss these projects and set the standards for future consultation with the Tribe. After reviewing the projects proposed in your letter, we do not consider it necessary to have a face-to-face consultation meeting at this point. However, if any future projects warrant a consultation meeting, the STOF would be happy to meet with members of your staff.

The projects listed above (#2) demonstrate the type of actions that we feel warrant Tribal consultation under Section 106 of the NHPA. As a general rule, the STOF would like to be consulted on any undertaking that includes ground disturbance or involves the transfer of federal property to a non-federal entity. Certain undertakings have little or no potential to impact the Tribe – routine building maintenance, building renovations, repaving roads/lots, etc. – and it is not necessary to initiate consultation unless historical, archaeological, or burial resources are inadvertently encountered during the undertaking. As a general rule, it is best to err on the side of consultation if there is any question whether the Tribe may have an interest in reviewing the undertaking. As always, the STOF-THPO reserves the right to use its discretion on a project-to-project basis in determining whether consultation is required.

Once again, thank you for the opportunity to comment on these projects. Please do not hesitate to contact the STOF-THPO with any questions or concerns and we look forward to working with you in the future.

Respectfully,



Andrew J. Weidman, MA, RPA  
STOF-THPO, Compliance Review Specialist  
30290 Josie Billie Hwy, PMB 1004  
Clewiston, FL 33440  
Office: 863-983-6549 x12216  
Email: andrewweidman@semtribe.com

cc: Bradley M. Mueller, Compliance Review Supervisor, THPO



DEPARTMENT OF THE AIR FORCE  
6TH AIR MOBILITY WING (AMC)  
MACDILL AIR FORCE BASE, FLORIDA

September 2, 2015

Mr. Robert B. Hughes  
6th Civil Engineer Squadron  
7621 Hillsborough Loop Drive  
MacDill Air Force Base FL 33621

Mr. Andrew J. Weidman  
Seminole Tribe of Florida  
30290 Josie Billie Highway PMB 1004  
Clewiston FL 33440

Dear Mr. Weidman

Thank you for your response to our consultation letters. We note the Seminole Tribe of Florida (STOF) has no objections to six of the eleven projects and we consider consultation complete on those projects. The STOF asked that consultation continue on the remaining five projects and suggested the need for a Cultural Resource Assessment Survey to be performed in the areas of potential effects (APEs) for each of the five project sites. As part of the continuing consultation process we want to ensure you are fully aware of MacDill Air Force Base's (AFB) prior efforts to document areas of cultural significance on the installation and solicit your thoughts on the need for a Cultural Resource Assessment Survey in light of the work that has previously been accomplished.

MacDill AFB has been surveyed a number of times for archaeological resources. A summary of the significant archaeological investigations at MacDill AFB include a University of South Florida investigation of the Gadsden Point area in 1952, an extensive survey of the golf course in 1983, a Cultural Resources Reconnaissance Survey of the entire installation by the National Park Service (NPS) in 1986, a survey of a proposed utility corridor along the perimeter of the installation in 1988, a Phase II evaluation of the Runway Site (8Hi3382) in 1991, and a Phase II evaluation of the Gadsden Point Site (8Hi50) and EOD Site (8Hi5656) in 1996. Those surveys resulted in the discovery of five recorded prehistoric archaeological sites, including two that are eligible for listing in the National Register of Historic Places (NRHP).

The NPS base wide evaluation of MacDill AFB in 1986 determined that 85 percent of the installation has been disturbed by construction, development of recreational areas, and periodic use including firing ranges, tree plots, fill sites, and explosive storage. The NPS determined that these disturbed areas have been extensively modified and offer little possibility of finding intact cultural resources. The remaining 15 percent of the installation, deemed largely undisturbed, underwent a Cultural Resources Reconnaissance Survey by the NPS. The Cultural Resources Reconnaissance Survey and testing efforts did not identify any additional archaeological sites and it was the opinion of the NPS that further cultural resources investigations of MacDill AFB were not warranted. The Florida SHPO concurred with the results of the NPS survey and considered the Cultural Resources

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Reconnaissance Survey of MacDill AFB to be complete and sufficient. Records of the consultation between MacDill AFB and the SHPO regarding the NPS Cultural Resources Reconnaissance Survey are attached, and records from the other archeological investigations can be provided upon request.

The Runway Site (8Hi3382) was discovered during the 1988 utility corridor survey. This site was determined to be eligible for the NRHP following a Phase II investigation in 1991.

The SHPO has more recently clarified the possibility of discovering unidentified archaeological resources on the installation could still exist. However, we feel this possibility is very low. Over the last two decades the base has undergone an extensive redevelopment effort involving the construction and demolition of buildings, roadways, utilities, and other infrastructure which has disturbed hundreds of acres of land throughout the entire installation. During this vigorous construction program, no archeological resources or sites have been discovered. To safeguard against the potential for impacts to archeological resources which could result from construction activities, all construction projects that involve subsurface excavation include language in the environmental documents to address the issue of inadvertent discovery. MacDill's Standard Operating Procedure (SOP) for inadvertent discovery requires all Air Force personnel, work crews, contractors or anyone else who finds known or likely human remains, unmarked graves, Native American and Euro-American artifacts or archeological features to stop all work when an inadvertent discovery is found and establish a 30-meter buffer around the discovery. The base Cultural Resources Manager must confirm all work has stopped and the area is secured and then notify the SHPO, Tribal Historic Preservation Officer, and any other appropriate state and or Federal agency. The (SOP) requires the discovery to be evaluated within 24 hours by appropriate experts.

Given the number of prior archaeological surveys of MacDill, the limited area of undisturbed land, the lack of any new discoveries of archeological sites since 1988, our Standard Operating Procedure for dealing with inadvertent discovery, and the limited potential for the proposed projects to adversely affect cultural resources we believe we have adequate safeguards in place to address the discovery of any future cultural resources.

We are very interested in meeting the expectations of the Seminole Tribe of Florida Tribal Historic Preservation Office with regard to historical, archeological, or burial resources on MacDill AFB. We wanted to make you aware of the information provided above as part of the continuing consultation process. We welcome your comments on this additional information and your thoughts on the need for a Cultural Resource Assessment Survey for these projects in light of this additional information.

Sincerely



ROBERT B. HUGHES, GS-14, DAF  
Director, 6th Civil Engineer Squadron

3 Attachments:

1. NPS Cultural Resources Reconnaissance, February 1986
2. NPS Letter to SHPO, August 1987
3. SHPO Letter to NPS, April 1987

ATTACHMENT 1

NPS Cultural Resources Reconnaissance, Dated 3 February 1986

February 3, 1987

Colonel Robert L. Bell  
Base Civil Engineer  
Headquarters, 56th Combat  
Support Group (TAC)  
MacDill Air Force Base, Florida 33608-5000

RE: Cultural Resources Reconnaissance, MacDill AFB, Florida

Dear Colonel Bell:

The National Park Service (NPS) and the Tactical Air Command (TAC) have entered into an interagency agreement for technical assistance on cultural resource management activities. In keeping with the agreement, I contacted Mr. Harry Knudsen of your staff to arrange for a preliminary on-site inspection of MacDill AFB to determine whether or not significant cultural resources exist there. The immediate needs of the inspection were to identify those areas of the base that have been so disturbed that there is no practical likelihood of significant cultural resources being present as well as those portions of the installation which might require a formal cultural resources survey.

My inspection was conducted on December 8-11, 1986, and included wind-shield and pedestrian inspection, archival research, personal contacts and oral accounts. A discussion of my visit follows. Areas and locations discussed are identified on the enclosed maps.

#### Archival and Document Research

Study began by contacting the base historian Mr. Scheer. Books, monographs, photographs, and maps covering the history of the base are located in Mr. Scheers' office and much of my documentary review was completed there.

MacDill Air Force Base, consisting of 5,631 contiguous acres is located at the southern end of the City of Tampa bordered by Tampa and Hillsborough Bay on the tip of Interbay Peninsula. The land was acquired for the Air Corps in 1939 with personnel arriving in 1940. Mr. Scheer said that prior to its purchase by the military the installation area was undeveloped swamp and flatwoods which were once prehistoric bay bottoms. The natural vegetation of the area is primarily pine and palmetto forest. The flatwoods are periodically flooded as they contain a high water table. The soils are a medium to fine sand with a thin layer of hardpan at variable depths below natural ground surface. The water table elevation varies from one to four feet below the surface depending upon location, season of year, and amount of rainfall.

There are no completely non-buildable areas at MacDill; but some areas, notably the mangrove swamps, would require unusually expensive and special preparation prior to construction.

Early photographs show the staggering amount of land modification that was undertaken during initial construction of the base. Thousands of cubic yards of material had to be excavated, moved, and compacted during the making of the air base proper (runways, taxiways, ramps, etc.) and more material was used for fill. I estimate that 59 percent (3,313 acres) has been built up to the maximum (figure 1, marked in yellow). This area is defined as the airfield proper, ramps, hangars, etc., and all the support facilities such as office buildings, living quarters, commissary facilities, etc. An additional ten percent (560 acres) has been completely modified for recreational purposes (figure 1, marked in green). Approximately 16 percent (916 acres) of the base is occupied by ammunition dumps, tank farms, landfills, explosive storage, a grenade launching practice range, and stands of planted pines for noise abatement; these were inspected to the extent that limited time, resources and Air Force clearances permitted (Figure 1, marked in blue). All of these areas have been extensively modified. The remaining 15 percent (885 acres) is comprised of mangrove swamp and 'green areas,' patches of open area supporting grass and/or scrub forest (Figure 1, marked in red). It was concluded from this research and conversations with Mr. Scheer and Mr. Bill Lewis, Superintendent of Pavements and Grounds, that there was little possibility of finding intact cultural resources on 85 percent of MacDill. Field survey could be limited to the 885 acres of currently open lands and mangrove.

Mr. Scheer reiterated that to the best of his knowledge the entire area of MacDill was undeveloped swamp land when first purchased by the military in 1939 and that there were no sites of historical interest at the time of purchase. This view was also stated by Mr. Bill Lewis. Brooks (1983, pp 14) reports that there was a 1900's period house located in the Gadsden Point area which has long been demolished, but in essence Brooks' historical document review does not reveal any historic activity which can be pinpointed with any degree of accuracy or shown to be historically significant. A thorough study of maps and other resources covering the history (including construction history) coupled with the accounts by the base historian and the Superintendent of Pavements and Grounds all suggest that there are no significant historic building sites of any nature located within the MacDill boundaries.

Two archeological sites, 8-Hi-49 and 8-Hi-50, are recorded for MacDill Air Force Base. Site 9-Hi-49 is no longer in existence (H.Knudsen, personal communication), but was in the southeast corner of Section 26, just west of Bayshore Drive, near the shore of Interbay Peninsula. This sand mound site was destroyed during construction of a golf course. Site 8-Hi-50, recorded in 1965, is an eroded beach site occurring just north of Gadsden Point.

This site received additional study in 1983 during an archeological assessment of designated areas within the proposed MacDill AFB 18 hole golf course. The conclusions of this study were that it was not eligible



for nomination to the National Register of Historic Places. The report went on to state that "No new archaeological sites were discovered during the survey" (Brooks, 1983, pp 28).

#### Windshield Survey

A driving tour was made of the entire base which confirmed the extensive amount of construction and land modification indicated by the documentary study. The possibility of locating intact cultural resources in the areas of base construction are nil and no further survey is considered necessary.

#### Pedestrian Inspection

A pedestrian survey was undertaken in the mangrove area as well as those areas that had been identified as 'green areas.' Color aerial photos of the base were studied to determine the potential for locating cultural resources in the suspect areas. Targets were noted on large scale Base Comprehensive Planning Maps provided by Mr. Knudsen. These maps were used in the field for purposes of navigation and reference. Mr. Knudsen also arranged for a small boat to conduct the reconnaissance of the mangrove. Entry into this area is generally prohibited and was coordinated with the fire control officer. The survey was initiated at high tide.

The mangrove (figure 1, marked in red) is characterized by well established and expanding mangrove and tidal flat habitats. A low intermittent beach ridge is developing along the southern shore of the Interbay Peninsula tip. By using the boat to reach some of the interior drainage canals it was possible to walk along such and ascertain that the entire area is a continuous dense growth of mangrove with several large spoil areas located along the northeast extension of Broad Creek. The inspection of this area revealed it to be composed of fine sands with small amounts of clayey shelly marl. No cultural material was discovered. Inspection was also made along the banks of Broad Creek and Coon Hammock Creek. The banks, again, are composed of fine homogeneous sands and with one exception no cultural material was discovered.

This exception was a large signature located on the aerial imagery and appeared to be an area of high ground located adjacent to Broad Creek (figure 2). Upon docking at the broad sandy beach located along the face of the target area, a few fragments of eroded aboriginal pottery were discovered.

Immediately behind the beach Coon Hammock rises approximately 5 feet above the creek and the entire hammock rim generally maintains this height. A narrow sandy road traverses the hammock in a north-south direction. When it reaches the creek it turns due east following the hammock rim. The road then goes through a low marshy area before ending at a little used boat ramp.

By walking the hammock rim and the road it was possible to see that the entire hammock supports a moderate stand of mature scrub oak (some

very large trees) and palmetto. Underbrush is moderate with many dispersed open areas. Surface inspection revealed several concentrations of whelks and conch shells laying on the surface. The roots of tree falls also contained considerable numbers of shell and the dark humic soil and shell mixture strongly suggested a subsurface midden.

Because of the high probability of finding archeological materials in this location the area was intensively surveyed with subsurface shovel tests being excavated on a judgemental basis. More systematic field coverage was not possible as large portions of the hammock area (hereafter referred to as Coon Hammock) have been covered with hundreds of dumptruck loads of spoil. These spoil areas are of varying depth and are randomly placed through most of the north and eastern portions of Coon Hammock. Testing along the western edge of the hammock was hampered by a gigantic landfill. Open areas and those that appeared to be low undisturbed internal mounds were tested to an average depth of 40 cm (18 inches) before the dark brown humic sands gave way to the light gray sand and marl characteristic of old beach ridge deposits. In most instances the subsurface tests suggested a definite, but dispersed, shell midden composed of great numbers of conch and whelk with lesser numbers of clams and snails. Many of the conch had a small hole near the top of the spiral suggesting that they had been used as a food resource. No other artifactual materials or faunal remains were recovered from the 72 shovel tests. It was noticed during the testing that there were earlier "prospecting" holes dug intermittently around the hammock. Apparently some unauthorized activities have been occurring here but the obviously meager amount of artifactual remains have discouraged any intensive or extensive digging.

#### Oral Accounts

Upon returning to the Marina at the conclusion of the mangrove reconnaissance and site testing, I talked to a number of local patrons who frequent that establishment. I was directed to a Mr. Bryan Robisheaux who, before retiring from the military, was a senior Master Sergeant stationed at MacDill. Mr. Robisheaux had been at the base for 18 years. He is a history buff and lapidarian and indicated that he had spent some of his free time "prospecting" throughout the base for interesting stones. He indicated to me that he had discovered 8-HI-49 while walking about the base and had notified the University of South Florida of the find.

I asked Mr. Robisheaux if he was aware of other cultural resources located on MacDill and at first he did not recall any. Somewhat later in the conversation he recalled digging along a high point on Broad Creek and noting some pottery. He then mentioned that his brother-in-law had been contracted to do some dredging in Broad Creek and the drainage canal that runs west of the sanitary land fill up to Southshore road. This individual also did some dredging in the canal which parallels the southwestern extension of the northeast-southwest instrument runway. In both instances Mr. Robisheaux said that numerous prehistoric projectile points were recovered from the spoil. This material was later turned over to the University of South Florida where it was subsequently discarded. Mr. Robisheaux did not recall any other locations on MacDill where he had located cultural material.

I contacted Piper Archeology, Inc. archeologists in the local area that I felt would be most familiar with the material I had located at Coon Creek Hammock. As they had already completed research on the base they were interested in looking at these new materials. Their personal examination of the materials I collected, along with my description of the site and its location, led Dr. Harry Piper to conclude that the Coon Hammock assemblage was very similar to the numerous small late Weeden Island Period sites which they had discovered in the mangrove areas of Weeden Island, St. Petersburg. This island fronts Old Tampa Bay and is directly west across the bay from MacDill. On the basis of our discussions Dr. Piper did not believe that the Coon Hammock Site contained information which would significantly contribute to our understanding the prehistory of the region.

#### Conclusions

On the basis of this onsite reconnaissance and other available information we conclude that there are no properties, prehistoric or historic, on MacDill AFB eligible for listing in the National Register of Historic Places. Based on the extensive base construction in concert with the existing land formations, it is also concluded that there is virtually no probability for the discovery of significant archeological sites on the installation.

The Coon Hammock site, is a very low density occupation, probably attributable to the Late Weeden Island Period. Because of the impact of fill dirt, roads and land fill, which occurs on the site, it can be readily stated that considerably better examples of this period can be found and no additional archeological work is needed here. Due to the tremendous expense, construction on Coon Hammock is most unlikely and the current desirability of preserving the mangrove areas would further discourage construction.

It is our opinion that further cultural resource investigation of MacDill AFB is not warranted.

#### Recommendations

MacDill AFB has indicated to the NPS that they intend to transmit our findings to the State Historic Preservation Officer with a request that he concur. We would recommend that the Air Force also submit to the SHPO the enclosed site location map and Florida Master Site File form. This will allow the SHPO to enter the location of the newly found site into the master site file and assign it a State site number.

If you have any question concerning my reconnaissance at MacDill Air Force Base please do not hesitate to contact me.

Sincerely,

John E. Ehrenhard  
Chief, Archeological  
Services Division

cc: Roy Barker  
Langley AFB, VA

#### References Cited

- Brooks, Mark J., Harry M. Piper and Catherine B. Slusser  
1983 An Archeological Survey of Designated Areas Within the  
Proposed MacDill Air Force Base 18 Hole Golf Course  
Hillsborough County, Florida. Piper Archaeological  
Research, Inc., St. Petersburg, Florida.

ATTACHMENT 2

NPS Letter to SHPO, Dated 24 August 1987



# United States Department of the Interior

## NATIONAL PARK SERVICE SOUTHEAST REGIONAL OFFICE

75 Spring Street, S.W.

Atlanta, Georgia 30303

IN REPLY REFER TO:

August 24, 1987

Mr. George W. Percy  
State Historic Preservation  
Officer  
Division of Archives, History,  
and Record Management  
Department of State  
The Capitol  
Tallahassee, Florida 32399-0250

RE: July 21, 1987, letter to Colonel Robert L. Bell, MacDill Air Force Base, Cultural Resource Assessment Review by George Percy covering NPS cultural resources reconnaissance, MacDill AFB.

Dear Mr. Percy:

We have received a copy of your review letter to Colonel Bell addressing the cultural resources reconnaissance carried out by this office for MacDill AFB in February. Your letter mentions that the Air Force might wish to conduct a systematic site assessment survey with judgemental subsurface testing within 50m of the edge of the mangroves. I have discussed this opinion with Mr. Louis Tesar and there appears to have been a misunderstanding concerning our survey of the mangrove and bay edge areas. I attribute this misunderstanding to the presentation of some of the survey data in the February 3 report to Colonel Bell.

I have elaborated with Mr. Tesar that we did not feel a systematic site assessment survey along the bay edge or in the mangrove was necessary as shovel testing was completed in these areas during the pedestrian survey. By using a boat to reach some of the interior drainage canals it was possible to walk along such and ascertain that the entire area is composed of fine sands mixed with a clayey shelly marl. This was determined by sifting through spoil piles along the canals, profiling canal cuts, and making judgemental shovel tests. Shovel testing was also undertaken along the entire length of the mangrove rim between the southwestern extension of the northeast-southwest instrument runway to the west and the marina to the east. Judgemental testing was completed at a minimum distance of 30m from the mangrove edge all along this area (outlined in red on Figure 1 in original report). Shovel tests were taken to an average depth of 40cm. Top soils consisted of light brown sands which gave way to gray sand and marl.

No prehistoric or historic material was recovered from these tests. It is our opinion that a systematic site assessment survey within

*Ray - good  
news, right?*



a 50m wide buffer area along the mangrove rim is not warranted.  
Your concurrence with this conclusion is requested.

If you have any questions or desire additional information, please  
do not hesitate to contact us at (404) 331-2629.

Sincerely,

A handwritten signature in dark ink, appearing to read "John E. Ehrenhard". The signature is fluid and cursive, with the first name "John" being more prominent.

John E. Ehrenhard  
Chief, Archeological  
Services Division

cc:

Colonel Bell, MacDill AFB, FL  
Roy Barker, Langley AFB, VA

ATTACHMENT 3

SHPO Letter to NPS, April 1987



APR 27 1988

REC-111

FLORIDA DEPARTMENT OF STATE

Jim Smith  
Secretary of State

DIVISION OF HISTORICAL RESOURCES

R.A. Gray Building  
Tallahassee, Florida 32399-0250  
(904) 488-1480

21st April, 1988

In Reply Refer To:

John E. Ehrenhard  
Chief, Archeological Services Branch  
Southeast Regional Office  
National Park Service  
Southeast Region  
75 Spring Street, S.W.  
Atlanta, Georgia 30303

Louis D. Tesar  
Historic Pre. Supv.  
(904) 487-2333

RE: August 24, 1988 letter  
Cultural Resource Assessment Supplemental information  
in response to July 21, 1987  
Letter to Colonel Robert L. Bell, MacDill  
Air Force Base, NPS Cultural Reconnaissance  
MacDill AFB, Pinellas County, Florida

Dear Mr. Ehrenhard:

In accordance with the procedures contained in 36 C.F.R., Part 800 ("Protection of Historic Properties"), we have reviewed the above referenced projects for possible impact to archaeological and historical sites or properties listed, or eligible for listing, in the National Register of Historic Places. The authority for these procedures is the National Historic Preservation Act of 1966 (Public Law 89-665), as amended.

Thank you for providing a second copy of your letter. We have no idea on the disposition of the original copy.

In your August 24, 1987 letter you state that shovel testing was indeed conducted along the bay edge and along the mangrove edges, even though that information had been omitted from your earlier February 3, 1987 report. You further describe the nature and extent of that testing. Based on that information, we are revising our earlier July 21, 1987 opinion on the need for additional work.

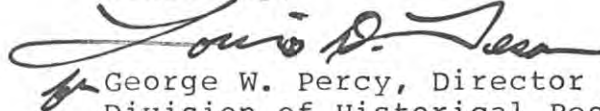
Based on your supplemental information, we find your Cultural Resources Survey of MacDill Air Force Base to be complete and sufficient. We, therefore, concur with the survey

John E. Ehrenhard  
21st April  
Page two

results and conclusions reported in your original February 3,  
1987 report to Col. Bell.

If you have any questions concerning our comments, please do  
not hesitate to contact us. Your interest and cooperation in  
helping to protect Florida's archaeological and other historical  
resources are appreciated.

Sincerely,

A handwritten signature in dark ink, appearing to read "George W. Percy". The signature is fluid and cursive, with a large initial "G" and a long, sweeping underline.

George W. Percy, Director  
Division of Historical Resources  
and  
State Historic Preservation Officer

GWP/LT

SEMINOLE TRIBE OF FLORIDA  
TRIBAL HISTORIC PRESERVATION OFFICE  
AH-TAH-THI-KI MUSEUM

TRIBAL HISTORIC  
PRESERVATION OFFICE  
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TRIBAL OFFICERS  
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JAMES E. BILLIE  
VICE CHAIRMAN  
MITCHELL CYPRESS  
SECRETARY  
LAVONNE KIPPENBERGER  
TREASURER  
PETER HAHN

September 30, 2015

Mr. Robert B. Hughes  
Director, 6<sup>th</sup> Civil Engineering Squadron  
7621 Hillsborough Loop Dr.  
MacDill AFB, FL 33621

**Subject:** Consultation Requests: 11 Letters Regarding Upcoming Projects at MacDill Air Force Base  
**THPO#:** 0028679 – 0028690

Thank you for your thorough response to our July 29<sup>th</sup>, 2015 letter regarding eleven upcoming projects at MacDill Air Force Base (AFB). We agree that consultation has been completed on six of the eleven projects listed in our original letter. We are also aware of MacDill AFB's previous efforts to identify cultural resources on the installation. It appears that many decisions regarding the possibility of current additional identification efforts rely on the 1986 evaluation which assessed 85 percent of the installation as disturbed and subjected the remaining 15 percent to a reconnaissance-level survey. However, it is unclear which areas of the installation fall within each category, as no clear map has been provided. Furthermore, it is not indicated whether the five projects we requested continued consultation on fall within the disturbed or undisturbed areas of the base.

Because the methods employed in the 1986 survey correspond to a basic reconnaissance-level survey, we believe that the possibility of encountering previously unidentified archaeological/cultural resources within the undisturbed areas of MacDill AFB remains. This is demonstrated by the subsequent discovery of the NRHP-eligible Runway Site (8HI3382) during the 1988 Phase I Cultural Resource Assessment Survey. Your letter dated September 2<sup>nd</sup>, 2015 acknowledges that this possibility exists, although it is "very low". As such, we believe that future undertakings in undisturbed areas that propose ground-disturbing activities should be evaluated according to Florida Division of Historical Resources Module 3 standards, which may involve conducting a Cultural Resource Assessment Survey.

Again, thank you for contacting us regarding these projects and we look forward to working with you throughout the consultation process.

Respectfully,

Andrew J. Weidman, MA, RPA

STOF-THPO, Compliance Review Section  
30290 Josie Billie Hwy, PMB 1004  
Clewiston, FL 33440  
Office: 863-983-6549 x12216  
Email: [andrewweidman@semtibe.com](mailto:andrewweidman@semtibe.com)





**DEPARTMENT OF THE AIR FORCE  
6TH AIR MOBILITY WING (AMC)  
MACDILL AIR FORCE BASE, FLORIDA**

29 December 2015

Mr. Robert B. Hughes  
6th Civil Engineer Squadron  
7621 Hillsborough Loop Drive  
MacDill Air Force Base FL 33621

Mr. Andrew J. Weidman  
Seminole Tribe of Florida  
30290 Josie Billie Highway PMB 1004  
Clewiston FL 33440

Dear Mr. Weidman

Thank you for your continued consultation regarding 11 upcoming construction projects which would result in ground disturbance at multiple locations around MacDill Air Force Base. As noted in your 30 September 2015 letter, we have concluded consultation on six of the future construction projects. Your letter requested that we evaluate the remaining five proposed construction sites according to Florida Division of Historical Resources Module 3 standards.

We have completed a Cultural Resources Assessment Survey of the three smallest proposed construction sites. A copy of the final survey report is attached for your review. Based upon the results of background research and a systematic archaeological field survey, the report concludes that no archaeological sites or historic resources would be affected by construction activities at these three sites.

We are working toward implementing Cultural Resources Assessment Surveys for the two remaining proposed construction sites. These construction sites are both significantly larger (~60 acres each) and the surveys will be accomplished individually as funding becomes available. We do not have an anticipated completion date for either survey at this time.

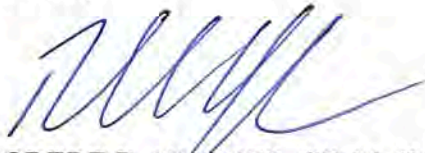
As you may be aware, facility construction/demolition and infrastructure improvement projects are routine on MacDill AFB. These routine construction activities all result in land disturbing activities. Given the volume of construction work on MacDill and the Air Force's requirement to complete tribal consultation for any land disturbing activity (Air Force Instruction 90-2002), there is a potential for the completion of numerous Cultural Resources Assessment Surveys in the future. This could be a costly endeavor. A base-wide Phase I archaeological survey has been proposed but may not be funded due to costs. As an alternative, we would like to propose the use of construction site monitoring as an alternative to pre-construction evaluation of individual project sites. The base Cultural Resources Manager would be responsible for conducting the construction site monitoring.

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We believe that construction site monitoring will be equally effective at insuring the protection of cultural resources within the developed areas of the base. If this approach is agreeable to you, we would like to develop a Memorandum of Agreement to formalize this procedure.

We hope that the attached Cultural Resource Assessment Survey meets your expectations. We will keep you updated on progress with completion of the two remaining surveys for the larger construction sites. If you agree that construction site monitoring could serve as an alternative to individual site surveys, we would like to pursue formalizing this practice as a long range solution for insuring the protection of historic resources at MacDill Air Force Base.

Sincerely

A handwritten signature in blue ink, appearing to read 'RBH', with a stylized flourish at the end.

ROBERT B. HUGHES, GS-14, DAF  
Director, 6th Civil Engineer Squadron

Attachment:

Phase I Cultural Resources Assessment Survey, December 2015

cc:

AFCEC/CZOE

ATTACHMENT 1

Phase I Cultural Resources Assessment Survey, December 2015

**PHASE I ARCHAEOLOGICAL SURVEY  
OF THREE CONSTRUCTION SITES  
AT MACDILL AIR FORCE BASE  
IN HILLSBOROUGH COUNTY, FLORIDA**

Prepared by:



*Florida's First Choice in Cultural Resource Management*

Archaeological Consultants, Inc.  
8110 Blaikie Court, Suite A  
Sarasota, Florida 34240  
(941) 379-6206  
Toll Free: 1-800-735-9906

In association with:

Akima Facilities Management  
P.O. Box 6350  
Tampa, Florida 33608-0350

December 2015

**PHASE I ARCHAEOLOGICAL SURVEY  
OF THREE CONSTRUCTION SITES  
AT MACDILL AIR FORCE BASE  
IN HILLSBOROUGH COUNTY, FLORIDA**

Prepared by:

**Archaeological Consultants, Inc.  
8110 Blaikie Ct., Suite A  
Sarasota, FL 34240**

In association with:

**Akima Facilities Management  
P.O. Box 6350  
Tampa, Florida 33608-0350**

**December 2015**

## EXECUTIVE SUMMARY

Archaeological Consultants, Inc. (ACI) conducted a Phase I archaeological survey of three proposed construction parcels for Akima Facilities Management on behalf of MacDill Air Force Base (AFB). The three proposed project sites are the Shoot House parcel, the Construct Warehouse District parcel, and the Demo/Construct Vehicle Operations Facility parcel. This work was requested by the Seminole Tribe of Florida-Tribal Historic Preservation Office (STOF-THPO) during consultation with the tribe on all three projects. This survey was conducted in accordance with and in partial fulfillment of the U.S. Air Force Air Mobility Command obligations under the *National Historic Preservation Act of 1966* (PL 96-515), as amended; the *Archaeological and Historical Preservation Act of 1974* (PL 93-291), as amended; and the *National Environmental Policy Act of 1969* (PL 90-190), among others. Fieldwork was carried out in accordance with the Florida Division of Historical Resources' (FDHR) *Cultural Resources Management Standards and Operational Manual*, Module 3, Guidelines for Use by Historic Preservation Professionals, Section 2.0. In addition, the survey and report meet the specifications set forth in Chapter 1A-46, *Florida Administrative Code* (revised August 21, 2002).

A Research Design was prepared by ACI for approval prior to the initiation of field survey. Background research findings, summarized in the Research Design, revealed that five previously recorded archaeological sites are located within MacDill AFB. None of these are located within or adjacent to any of the three proposed construction parcels. The Air Force determined that the 3-acre Shoot House construction parcel had a high archaeological potential, whereas the other two parcels had low archaeological potential. Systematic subsurface testing and surface reconnaissance was conducted within each of the parcels. No archaeological sites were discovered. The pre-contract site visit revealed an absence of historic resources within the three parcels, and thus, a historic structures survey was not conducted as part of this project.

In conclusion, based upon the results of background research and systematic archaeological field survey, no archaeological sites or historic resources that are listed, eligible, or considered potentially eligible for inclusion in the NRHP will be affected by the proposed undertaking. No further archaeological investigations are recommended.



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## 1.0 INTRODUCTION

### 1.1 Project Description

Three upcoming construction projects will require ground disturbance in areas of MacDill Air Force Base (AFB) that may not have been historically disturbed by base development activities. A base-wide survey of the installation was completed in 1986 by the National Park Service (NPS). This survey effort determined that 85% of the installation had been disturbed historically and offered no potential for discovering previously unidentified archeological sites (Ehrenhard 1987). The 1986 NPS survey focused on the remaining 15% of the installation; completing a reconnaissance-level survey consisting of windshield surveys and pedestrian surveys with judgmental shovel testing. The three proposed project sites, the Shoot House parcel, the Construct Warehouse District parcel, and the Demo/Construct Vehicle Operations Facility parcel (**Figure 1.1**) are located within the 85% of the installation assessed as disturbed by the NPS. Consultation with the Seminole Tribe of Florida Tribal Historic Preservation Office (STOF-THPO) determined that this disturbed portion of the base may offer the potential for encountering previously unidentified archeological/cultural resources. The sites identified for this Phase I survey include three proposed facility construction sites, which are roughly five acres in area. A pre-bid visit to each proposed construction site indicated an absence of potential historic resources (buildings, structures, cemeteries, etc.). Therefore, historical/architectural field survey was not performed.

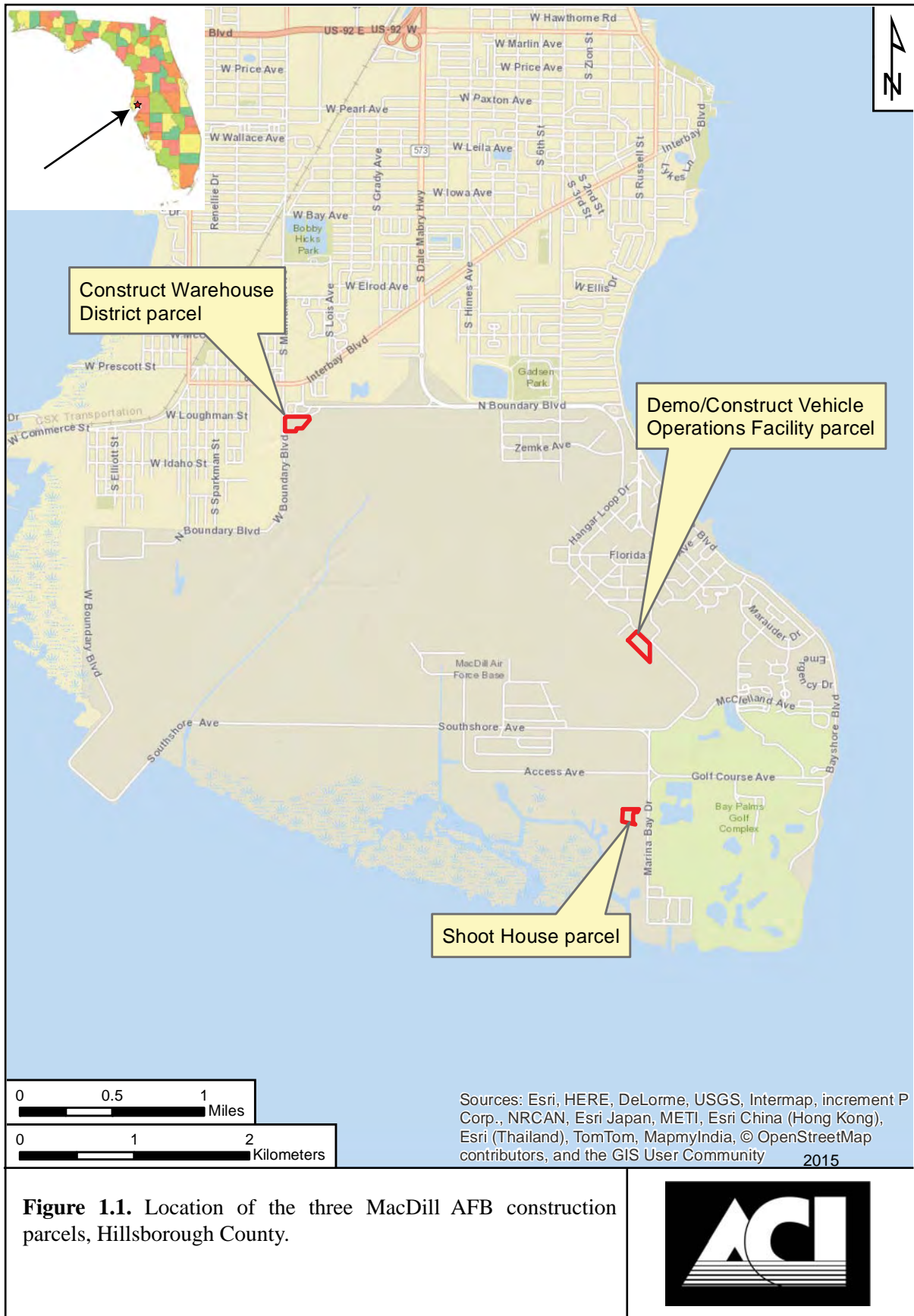
This cultural resource assessment survey (CRAS) was conducted in accordance with and in partial fulfillment of the U.S. Air Force Air Mobility Command obligations under the *National Historic Preservation Act of 1966* (PL 96-515), as amended; the *Archaeological and Historical Preservation Act of 1974* (PL 93-291), as amended; and the *National Environmental Policy Act of 1969* (PL 90-190), among others. Fieldwork was conducted in accordance with the Florida Division of Historical Resources' (FDHR) *Cultural Resources Management Standards and Operational Manual*, Module 3, Guidelines for Use by Historic Preservation Professionals, Section 2.0. In addition, the survey and report meet the specifications set forth in Chapter 1A-46, *Florida Administrative Code* (revised August 21, 2002).

### 1.2 Project Area of Potential Effects

The Area of Potential Effect (APE) for this project area is defined as the footprint of each construction area; the Shoot House is 3.0 acres in size, the Demo/Construct Vehicle Operations Facility is 5.5 acres, and the Construct Warehouse District is 5.5 acres.

### 1.3 Purpose

The goal of the Phase I archaeological survey of each proposed construction site was to determine the presence or absence of archaeological/cultural sites in advance of the proposed ground disturbing activities. Any newly discovered cultural resources were assessed, to the extent possible, as to their eligibility for listing in the National Register of Historic Places (NRHP). Background research and preparation and approval of a Research Design preceded field survey. Such research served to provide an informed set of expectations concerning the kinds of cultural resources that might be expected within the project sites, as well as a basis for evaluating any newly discovered sites. The Research Design contained the results of background research and the proposed approach and methods for the Phase I archaeological survey, including procedures to address the discovery of human remains and pertinent research questions and guidelines for the evaluation of site significance.



**Figure 1.1.** Location of the three MacDill AFB construction parcels, Hillsborough County.

## 2.0 ENVIRONMENTAL SETTING

### 2.1 Location and Setting

The three proposed construction parcels are located in Township 30 South, Range 18 East in Sections 21, 27, and 34 (United States Geological Survey [USGS] Port Tampa and Gibsonton 1982) (**Figure 2.1**). The general project area is situated on the Interbay Peninsula, which is bounded by Hillsborough Bay on the east, Old Tampa Bay to the west, and Tampa Bay to the south. The Shoot House parcel, is currently an overgrown field that previously was used as a wastewater spray field. The Demo/Construct Vehicle Operations Facility area is characterized by maintained lawn; it is located adjacent to an apron and several buildings. This parcel has been at least partially disturbed by utility line installation. The Construct Warehouse District area is grassed and contains a vehicle/equipment storage area. It has been disturbed, in part, by contaminated soil removal and placement of utilities.

### 2.2 Physiography and Geology

The project area is located within the Mid-peninsula physiographic zone (White 1970), which is characterized by gently rolling topography with a series of low hills and valleys paralleling the coast. MacDill AFB, situated within the Gulf Coastal Lowlands, contains nearly level land, roughly 2-3 meters (m) (5-10 (feet [ft]) above mean sea level. The lithology consists of the Hawthorn Group, Arcadia Formation, Tampa Member, which is surficially evidenced by limestone (Knapp 1980; Scott 2001; Scott et al. 2001).

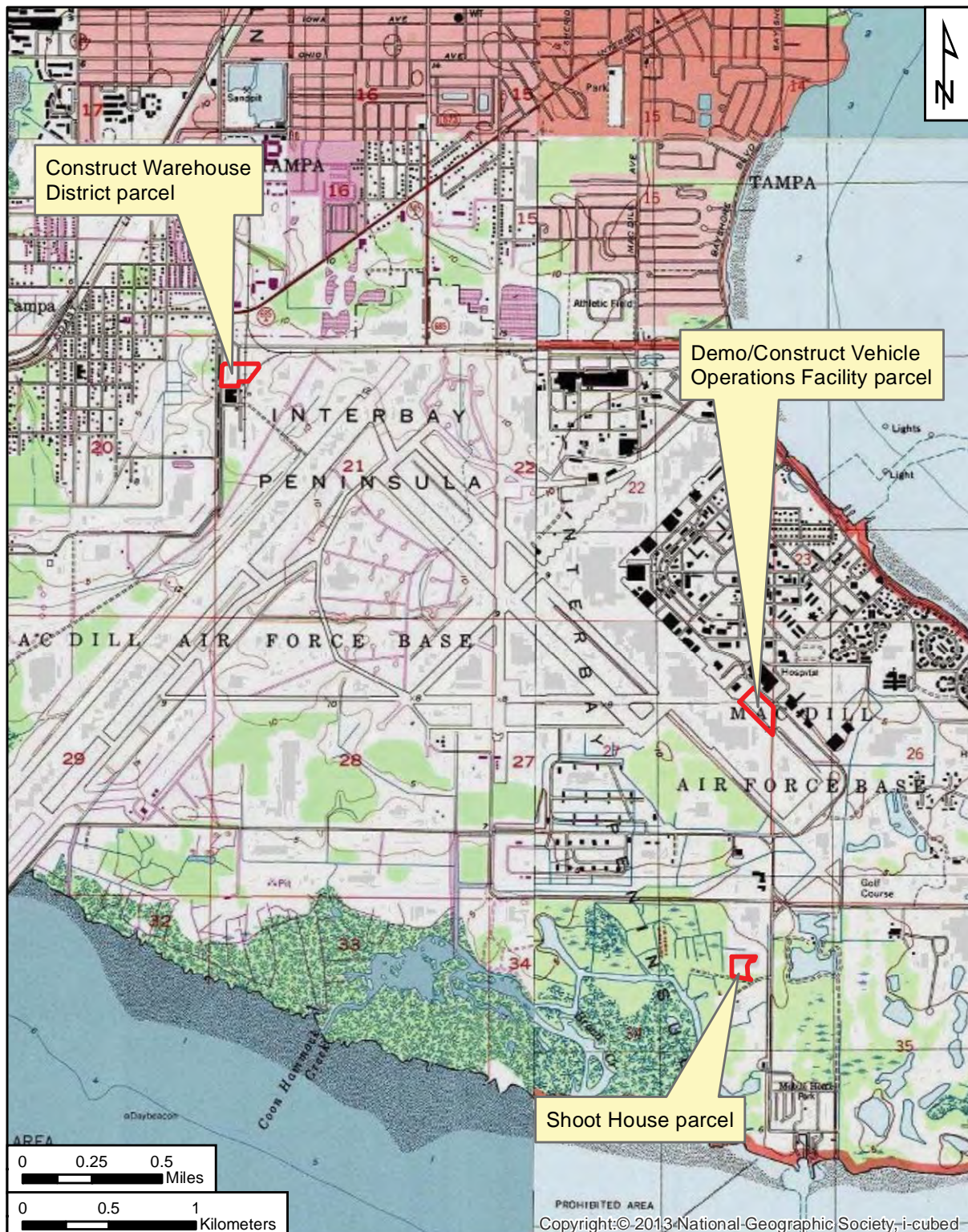
### 2.3 Soils and Vegetation

According to the U.S. Department of Agriculture (USDA) *Soil Survey of Hillsborough County, Florida*, the project area occurs within the Urban land-Myakka-Smyrna soil association, which is characterized by nearly level, poorly drained soils of the flatwoods that have been modified for urban use (Doolittle et al. 1989). The proposed construction parcels are underlain by the poorly drained Myakka fine sand, Malabar fine sand, and Myakka-Urban land complex (Doolittle et al. 1989). Malabar sand occurs in low-lying sloughs and shallow depressions in the flatwoods. The native vegetation would have included cabbage palm, longleaf pine, and slash pine with an understory of broomsedge, bluestem, inkberry, maidencane, saw palmetto, and waxmyrtle. Myakka fine sand occurs on broad plains in the flatwoods. It supports longleaf and slash pine with an understory of gallberry, running oak, saw palmetto, pineland threeawn, and waxmyrtle. Based on the 1938 aerial photos, all three parcels were proximate to a seasonal wetland and/or slough (USDA 1938).

### 2.4 Paleoenvironmental Considerations

The early environment of the region was different from that seen today. Sea levels were lower, the climate was arid, and fresh water was scarce. An understanding of human ecology during the earliest periods of human occupation in Florida cannot be based on observations of the modern environment because of changes in water availability, botanical communities, and faunal resources. Aboriginal inhabitants would have developed cultural adaptations in response to the environmental changes taking place, which were then reflected in settlement patterns, site types, artifact forms, and subsistence economies.





**Figure 2.1.** Environmental setting of the three MacDill construction parcels; Sections 21, 27 and 34 of Township 30 South, Range 18 East (USGS Port Tampa and Gibsonton, 1982).





Due to the arid conditions between 16,500 and 12,500 years ago, the perched water aquifer and potable water supplies were absent (Dunbar 1981:95). Palynological studies conducted in Florida and Georgia suggest that between 13,000 and 5,000 years ago, this area was covered with an upland vegetation community of scrub oak and prairie (Watts 1969, 1971, 1975). The rise of sea level reduced xeric habitats over the next several millennia. Intermittent flow in the Hillsborough River some 8500 years ago was likely due to precipitation and surface runoff, and by 6000 years ago, the river probably began flowing due to spring discharge from the Floridan aquifer (Dunbar 1981:99).

Around 5000 years ago, a climatic event marking a brief return to Pleistocene climatic conditions induced a change toward more open vegetation. Southern pine forests replaced the oak savannahs. Extensive marshes and swamps developed along the coasts and subtropical hardwood forests became established along the southern tip of Florida (Delcourt and Delcourt 1981). Northern Florida saw an increase in oak species, grasses, and sedges (Carbone 1983). At Lake Annie, in south central Florida, pollen cores were dominated by wax myrtle and pine. The assemblage suggests that by this time, a forest dominated by longleaf pine along with cypress swamps and bayheads existed in the area (Watts 1971, 1975). By about 3500 BCE (Before Common Era), surface water was plentiful in karst terrains and the level of the Floridan aquifer rose to 1.5 m (5 ft) above present levels. After this time, modern floral, climatic, and environmental conditions began to be established.

### 3.0 CULTURAL CHRONOLOGY

A discussion of the regional culture history is included to provide a framework within which the local historical and archaeological records can be examined. Archaeological sites and historic features are not individual entities, but rather are part of once dynamic cultural systems. As a result, individual sites cannot be adequately examined or interpreted without reference to other sites and resources in the area.

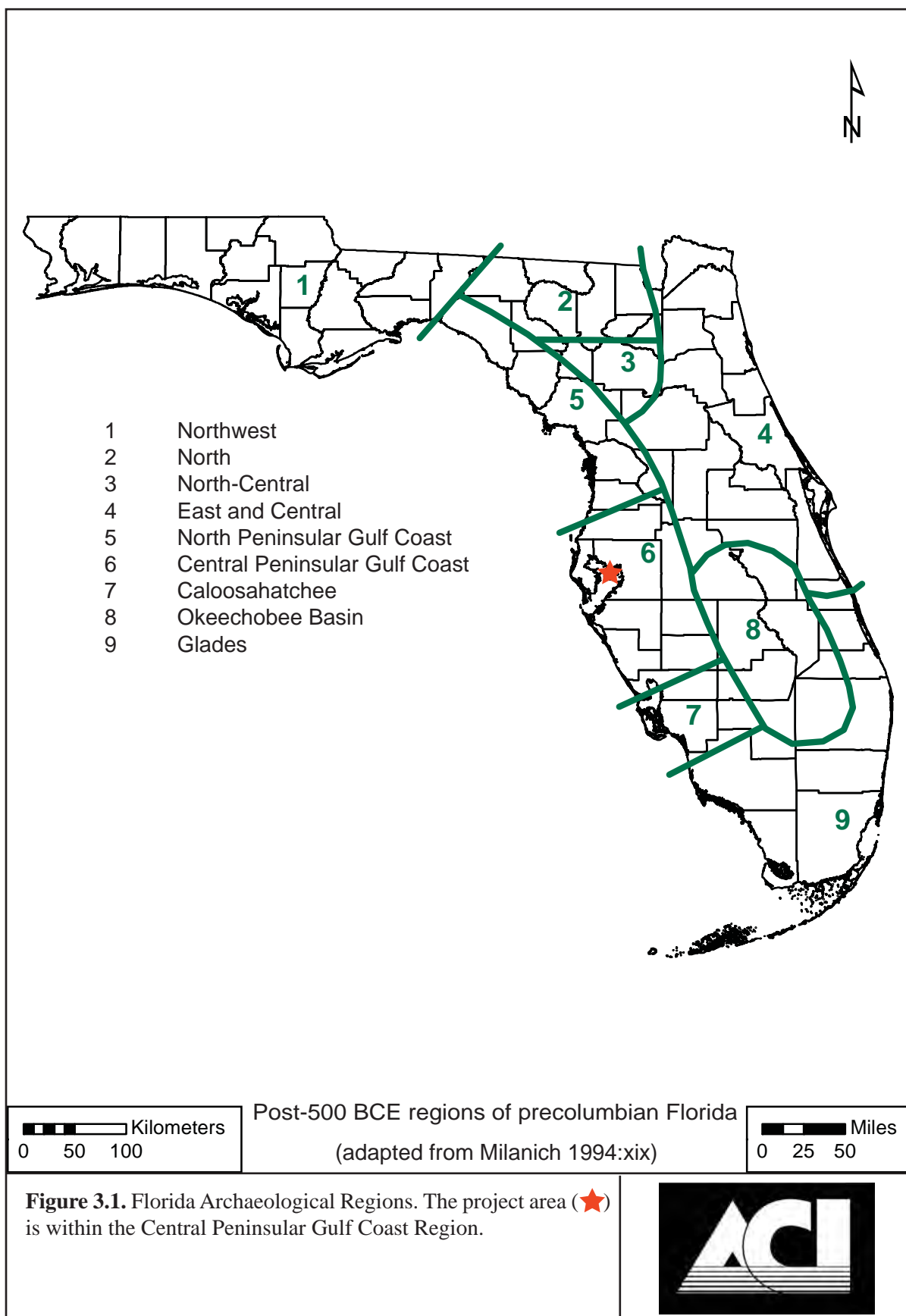
In general, archaeologists summarize the culture history of an area (i.e., an archaeological region) by outlining the sequence of archaeological cultures through time. These are defined largely in geographical terms but also reflect shared environmental and cultural factors. MacDill AFB is located in the Central Peninsular Gulf Coast archaeological region (Milanich 1994; Milanich and Fairbanks 1980). This region extends from just north of Tampa Bay southward to the northern portion of Charlotte Harbor (**Figure 3.1**). Within this zone, the Paleoindian, Archaic, Formative, and Mississippian stages have been defined based on unique sets of material culture traits such as stone tools and ceramics as well as subsistence, settlement, and burial patterns. These broad temporal units are further subdivided into culture phases or periods.

The local history of the region is divided into four broad periods based initially upon the major governmental powers. The first period, Colonialism, occurred during the exploration and control of Florida by the Spanish and British from around 1513 until 1821. At that time, Florida became a territory of the U.S. and 21 years later became a State (Territorial and Statehood). The Civil War and Aftermath (1861-1899) period deals with the Civil War, the period of Reconstruction following the war, and the late 1800s, when the transportation systems were dramatically increased and development throughout the state expanded. The Twentieth Century period includes subperiods defined by important historic events such as the World Wars, the Boom of the 1920s, and the Depression. Each of these periods evidenced differential development and utilization of the region, thus effecting the historic site distribution.

#### 3.1 Paleoindian

The Paleoindian stage is the earliest known cultural manifestation in Florida, dating from roughly 12,000 to 7500 BCE (Milanich 1994). Archaeological evidence for Paleoindians consists primarily of scattered finds of diagnostic lanceolate-shaped projectile points. The Florida peninsula at this time was quite different than today. In general, the climate was cooler and drier with vegetation typified by xerophytic species with scrub oak, pine, open grassy prairies, and savannas (Milanich 1994:40). When human populations were arriving in Florida, the sea levels were still as much as 40 to 60 m (130-200 ft) below present levels and coastal regions of Florida extended miles beyond present-day shorelines (Faught 2004). Thus, many sites have been inundated (Faught and Donoghue 1997).

The Paleoindian period has been sub-divided into three horizons based upon characteristic tool forms (Austin 2001). Traditionally, it is believed that the Clovis Horizon (10,500-9000 BCE) represents the initial occupation of Florida and is defined based upon the presence of the fluted Clovis points. These are somewhat more common in north Florida. Research suggests that Suwannee and Simpson points may be contemporary with or predate Clovis (Dunbar 2006a; Stanford 1991). The Suwannee Horizon (9000-8500 BCE) is the best known of the three Paleoindian horizons. The lanceolate-shaped, unfluted Simpson and Suwannee projectile points are diagnostic of this time (Bullen 1975; Daniel and Wisenbaker 1987; Purdy 1981). The Suwannee tool kit includes a variety of scrapers, adzes, spokeshaves, unifacially retouched flakes, and blade-like flakes as well as bone and ivory foreshafts, pins, awls, daggers, anvils, and abraders (Austin 2001:23).



Following the Suwannee Horizon is the Late Paleoindian Horizon (8500-8000 BCE). The smaller Tallahassee, Santa Fe, and Beaver Lake projectile points have traditionally been attributed to this horizon (Milanich 1994). However, many of these points have been recovered stratigraphically from late Archaic and early Woodland period components and thus, may not date to this period at all (Austin 2001; Farr 2006). Florida notched or pseudo-notched points, including the Union, Greenbriar, and Hardaway-like points may represent late Paleoindian types, but these types have not been recovered from datable contexts and their temporal placement remains uncertain (Dunbar 2006a:410).

Archaeologists hypothesize that Paleoindians lived in migratory bands and subsisted by gathering and hunting, including the now-extinct Pleistocene megafauna. It is likely that these nomadic hunters traveled between permanent and semi-permanent sources of water, such as artesian springs, exploiting the available resources. These watering holes would have attracted the animals, thus providing food and drink. In addition to being tethered to water sources, most of the Paleoindian sites are close to good quality lithic resources. The settlement pattern consisted of the establishment of semi-permanent habitation areas and the movement of the resources from their sources of procurement to the residential locale by specialized task groups (Austin 2001:25).

Although the Paleoindian period is generally considered to have been cooler and drier, there were major variations in the inland water tables resulting from large-scale environmental fluctuations. There have been two major theories as to why most Paleoindian materials have been recovered from inundated sites. The Oasis theory, put forth by Wilfred T. Neill, was that due to low water tables and scarcity of potable water, the Paleoindians and the game animals upon which they depended clustered around the few available water holes that were associated with sinkholes (Neill 1964). Whereas, Ben Waller postulated that the Paleoindians gathered around river-crossings to ambush the large Pleistocene animals as they crossed the rivers (Waller 1970). This implies periods of elevated water levels. Based on the research along the Aucilla and Wacissa Rivers, it appears that both theories are correct, depending upon what the local environmental conditions were at that time (Dunbar 2006b). As such, during the wetter periods, populations became more dispersed because the water resources were abundant and the animals they relied on could roam over a wider range.

Some of the information about this period has been derived from the underwater excavations at two inland spring sites in Sarasota County: Little Salt Spring and Warm Mineral Springs (Clausen et al. 1979). Excavation at the Harney Flats Site in Hillsborough County has provided a rich body of data concerning Paleoindian life ways. Analysis indicates that this site was used as a quarry-related base camp with special use activity areas (Daniel and Wisenbaker 1987). It has been suggested that Paleoindian settlement may not have been related as much to seasonal changes as generally postulated for the succeeding Archaic period, but instead movement was perhaps related to the scheduling of tool-kit replacement, social needs, and the availability of water, among other factors (Daniel and Wisenbaker 1987:175). Investigations along the Aucilla and Wacissa Rivers, as well as other sites within the north Florida rivers, have provided important information on the Paleoindian period and how the aboriginals adapted to their environmental setting (Webb 2006). Studies of the Pleistocene faunal remains from these sites clearly demonstrate the importance of these animals not for food alone, but as the raw material for their bone tool industry (Dunbar and Webb 1996).

### **3.2 Archaic**

Climatic changes occurred, resulting in the disappearance of the Pleistocene megafauna and the demise of the Paleoindian culture. The disappearance of the mammoths and mastodons resulted in a reduction of open grazing lands, and thus, the subsequent disappearance of grazers such as horse, bison, and camels. With the reduction of open habitat, the herd animals were replaced by the more

solitary, woodland browser: the white-tailed deer (Dunbar 2006a:426). The intertwined data of megafauna' extinction and cultural change suggests a rapid and significant disruption in both faunal and floral assemblages. The Bolen people represent the first culture adapted to the Holocene environment (Carter and Dunbar 2006). This included a more specialized toolkit and the introduction of chipped-stone woodworking implements.

Due to a lack of excavated collections and the poor preservation of bone and other organic materials in the upland sites, our knowledge of the Early Archaic artifact assemblage is limited (Carter and Dunbar 2006; Milanich 1994). Discoveries at the Page-Ladson, Little Salt Spring, and Windover sites indicate that bone and wood tools were used (Clausen et al. 1979; Doran 2002; Webb 2006). The archaeological record suggests a diffuse, yet well-scheduled, pattern of exploiting both coastal and interior resources. Because water sources were much more numerous and larger than previously, the Early Archaic peoples could sustain larger populations, occupy sites for longer periods, and perform activities requiring longer occupations at a specific locale (Milanich 1994:67).

Marked environmental changes, which occurred some 6500 years ago, had a profound influence upon human settlement and subsistence practices. Among the landscape alterations were rises in sea and water table levels that resulted in the creation of more available surface water. In addition to changed hydrological conditions, this period is characterized by the spread of mesic forests and the beginnings of modern vegetation communities including pine forests and cypress swamps. Humans adapted to this changing environment and regional and local differences are reflected in the archaeological record (Russo 1994a, 1994b; Sassaman 2008).

The Middle Archaic archaeological record is better understood than the Early Archaic. The material culture inventory included several stemmed, broad blade projectile point types including the Newnan, Levy, Marion, and Putnam types (Bullen 1975). Population growth, as evidenced by the increased number of Middle Archaic sites and accompanied by increased socio-cultural complexity, is assumed for this time (Milanich and Fairbanks 1980). Site types included large base camps, smaller special-use campsites, quarries, and burial areas. The most common sites are the smaller campsites, which were most likely used for hunting or served as special-use extractive sites for such activities as gathering nuts or other botanical materials. At quarry sites, aboriginal populations mined stone for their tools. They usually roughly shaped the stone prior to transporting it to another locale for finishing. Base camps are identified by their larger artifact assemblages and wider variety of tools.

During the Late Archaic period, population increased and became more sedentary. The broad-bladed, stemmed projectile styles of the Middle Archaic continued to be made with the addition of Culbreath, Lafayette, Clay, and Westo point types (Bullen 1975). A greater reliance on marine resources is indicated in coastal areas. Subsistence strategies and technologies reflect the beginnings of an adaptation to these resources. Around 4000 years ago, evidence of fired clay pottery appears in Florida. The first ceramic types, tempered with fibers (Spanish moss or palmetto), are referred to as the Orange series. Initially, it was thought that they lacked decoration until about 1700 BCE, when they were decorated with geometric designs and punctations. Research has called this ceramic chronology into question; AMS dates from a series of incised Orange sherds from the middle St. Johns River Valley, have produced dates contemporaneous with the plain varieties (Sassaman 2003).

Milanich (1994:86-87) suggests that while there may be little difference between Middle and Late Archaic populations, there are more Late Archaic sites and they were primarily located near wetlands. The abundant wetland resources allowed larger settlements to be maintained. It is likely that the change in settlement patterns was related to the environmental changes. By the end of the Middle Archaic, the climate closely resembled that of today; vegetation changed from those species which preferred moist conditions to pines and mixed forests (Watts and Hansen 1988). Sea levels

rose, inundating many sites located along the shoreline. The adaptation to this environment allowed for a wider variety of resources to be exploited and a wider variation in settlement patterns. No longer were the scarce waterholes dictating the location of sites. Shellfish, fish, and other food sources were now available from coastal and freshwater wetlands resulting in an increased population size.

The Late Archaic Transitional stage refers to that portion of the ceramic Archaic when sand was mixed with the fibers as a tempering agent. The same settlement and subsistence patterns were being followed. It has been suggested that during this period there was a diffusion of cultural traits as a result of the movement of small groups (Bullen 1959, 1965). This resulted in the appearance of several different ceramic and lithic tool traditions, and the beginning of cultural regionalism.

### **3.3 Formative**

The Formative stage is comprised of the Manasota and Weeden Island-related cultures (ca. 500 BCE to 800 CE [Common Era]). Settlement patterns consisted of permanent villages located along the coast with seasonal forays into the interior to hunt, gather, and collect those resources unavailable along the coast. Most Manasota sites are shell middens found on or near the shore where aboriginal villagers had easiest access to fish and shellfish (Milanich 1994). The subsistence economy focused on the coastal exploitation of maritime resources, supplemented by the hunting and gathering of inland resources (Luer and Almy 1982). Investigations at the Shaw's Point, Fort Brook Midden, Yat Kitischee, and Myakkahatchee sites have provided a wealth of information on site formation, subsistence economies, and technology and their changes over time (Austin 1995; Austin et al. 1992; Luer et al. 1987; Schwadron 2002). The major villages were located along the shore with smaller sites being located up to 19-29 km (12-18 mi) inland. These inland sites, which probably served as seasonal villages or special-use campsites, were often located in the pine flatwoods on elevated lands proximate to a source of freshwater where a variety of resources could be exploited (Austin and Russo 1989; Luer and Almy 1982). Hardin and Piper (1984) suggest that some of the larger inland sites may actually be permanent or semi-permanent settlements as opposed to seasonal campsites.

Manasota is characterized by a wide range of material cultural traits such as a well-developed shell and bone tool technology, sand tempered plain ceramics, and burials within shell middens (Luer and Almy 1982). Much of the shell and bone technology evolved out of the preceding Archaic period. Through time, the burial patterns became more elaborate, with burials being placed within sand burial mounds located near the villages and middens. The early burial patterns consisted of primary flexed burials in the shell middens, while later sites contained secondary burials within sand mounds.

Temporal placement within the Manasota period can be determined based upon diagnostic ceramic rim and vessel forms (Luer and Almy 1982). The early forms (ca. 500 BCE to 400 CE) are characterized as flattened globular bowls with incurving rims and chamfered lips. Pot forms with rounded lips and inward curving rims were utilized from about 200 BCE until 700 CE. Deeper pot forms with straight sides and rounded lips were developed around 400 CE and continued into the Safety Harbor period. Simple bowls with outward curving rims and flattened lips were used from the end of the Late Weeden Island period (ca. 800 CE) into the Safety Harbor period. Vessel wall thickness decreased over time.

The lithic assemblage of the Manasota culture was scarce along the coast especially in the more southern portions of the region where stone suitable for tool manufacture was absent. Projectile point types associated with the Manasota period include the Sarasota, Hernando, and Westo varieties (Luer and Almy 1982).



Influences from the Weeden Island “heartland,” located in north-central Florida, probably resulted in the changes in burial practices. These influences can also be seen in the increased variety of ceremonial ceramic types through time. The secular, sand tempered ware continued to be the dominant ceramic type. Manasota evolved into what is referred to as a Weeden Island-related culture. The subsistence and settlement patterns remained consistent. Hunting and gathering of the inland and coastal resources continued. Evidence of a widespread trade network is seen by the ceramic types and other exotic artifacts present within the burial mounds.

Ceremonialism and its expressions, such as the construction of complex burial mounds containing exotic and elaborate grave offerings, reached their greatest development during this period. Similarly, the subsistence economy, divided between maritime and terrestrial animals and perhaps horticultural products, represents the maximum effective adjustment to the environment. Many Weeden Island-related sites consist of villages with associated mounds, as well as ceremonial/burial mound sites. The artifact assemblage is distinguished by the presence of Weeden Island ceramic types. These are among some of the finest ceramics in the Southeast; they are often thin, well-fired, burnished, and decorated with incising, punctations, complicated stamping, and animal effigies (Milanich 1994:211). Coastal sites are marked by the presence of shell middens, indicating a continued pattern of exploitation of marine and estuarine resources. Interaction between the inland farmer-gatherers and coastal hunter-gatherers may have developed into mutually beneficial exchange systems (Kohler 1991:98). This could account for the presence of non-locally made ceramics at some of the Weeden Island-related period sites. There is no definitive evidence for horticulture in the coastal area (Milanich 1994:215).

### **3.4 Mississippian**

The final aboriginal cultural manifestation in the Central Peninsular Gulf Coast region is Safety Harbor, named for the type-site in Pinellas County. The presence of datable European artifacts (largely Spanish) in sites, along with radiocarbon dates from early Safety Harbor contexts associated with Englewood ceramics, provide the basis for dividing the Safety Harbor period into two pre-Columbian phases: Englewood (900-1000 CE) and Pinellas (1000-1500 CE) and two colonial period phases: Tatham (1500-1567 CE) and Bayview (1567-1725 CE) (Mitchem 1989). The Safety Harbor variant in Hillsborough, northern Manatee, Pinellas, and southern Pasco counties is identified as the Circum-Tampa Bay regional variant.

Although inland sites do occur, the Safety Harbor culture was primarily a coastal phenomenon (Mitchem 1989, 2012). Large coastal towns or villages often had a temple mound, plaza, midden, and a burial mound associated with them. Although some maize agriculture may have been practiced by the Safety Harbor peoples, the coastal environment was not suitable for intensive maize agriculture (Luer and Almy 1981; Mitchem 2012). Away from the coastal plain, a more dispersed pattern of smaller settlements was evident and the burial mounds appear to have been located away from the habitation areas (Mitchem 1988, 1989).

Influences from the north led to the incorporation of some Mississippian traits by the late Manasota peoples, which became the Safety Harbor culture. Most, Safety Harbor components are located on top of the earlier Manasota deposits and there is evidence of significant continuity from Manasota into Safety Harbor. However, in some areas, Manasota continued later than previously thought, while in other areas Englewood did not appear to have occurred at all (Austin et al. 2008). The lack of the diagnostic Englewood ceramics at many sites may indicate that the Englewood phase was skipped in the developmental sequence from Manasota to Safety Harbor (Mitchem 2012).

The primary difference between Manasota and Safety Harbor is the ceramic assemblage. The utilitarian ceramics include the Pasco (limestone tempered), Pinellas (laminated paste), and sand tempered plain varieties. The decorated ceramics, primarily recovered from burial mounds, include Englewood Incised, Sarasota Incised, Lemon Bay Incised, St. Johns Check Stamped, Safety Harbor, Incised, and Pinellas Incised (Willey 1949). The adoption of Mississippian traits such as jar and bottle forms, and the guilloche or loop design, are indicative of this period. However, unlike most Mississippian period ceramics, the use of mussel shell as the aplastic is not present (Mitchem 2012).

Trade between the Safety Harbor people and other Southeastern Mississippian cultures took place. It is likely that marine whelks and conchs were traded with groups in the Southeast and Midwest. In turn, items such as copper and ground-stone artifacts made their way south. Based on Spanish accounts, the Safety Harbor culture had evolved into a chiefdom form of government, albeit minus the maize agriculture of other Mississippian period groups in the Southeast. This lack of agriculture was likely due to the extremely successful adaptation to the local environment and the lack of suitable soils for the production of maize. Mitchem notes that although contact with Mississippian people may have led to political and religious changes, there was not a compelling reason to change their lifestyle completely (Mitchem 2012:185).

### 3.5 Colonialism

The Timucuan Indians are the historic counterparts of the Safety Harbor people. In the Tampa Bay area they are referred to as the Tocobaga, extending from roughly Tarpon Springs southward to the Sarasota area (Bullen 1978). The Tocobaga consisted of a number of small chiefdoms whose leaders frequently waged war against each other. The most powerful chiefdom was Tocobaga, located at the head of Old Tampa Bay at the Safety Harbor site; other major chiefdoms included the Mocoço (at the mouth of the Alafia River) and Ucita (at the mouth of the Little Manatee River) (Hann 2003).

The cultural traditions of the native Floridians ended with the advent of European expeditions to the New World. The initial events, authorized by the Spanish crown in the 1500s, ushered in devastating European contact. After Ponce de Leon's landing near St. Augustine in 1513, Spanish explorations were confined to the west coast of Florida; Narvaéz is thought to have made shore in 1528 in St. Petersburg and de Soto's 1539 landing is commemorated at De Soto Point on the south bank of the Manatee River. The Spaniards briefly established a fort and garrison at Tocobaga in the 1560s. In 1568, the Tocobaga killed all of the soldiers and when a Spanish supply ship arrived, the Tocobaga left and the Spanish burned the village (Hann 2003).

The area that now constitutes the State of Florida was ceded to England in 1763 after two centuries of Spanish possession. England governed Florida until 1783 when the Treaty of Paris returned Florida to Spain; however, Spanish influence was nominal during this second period of ownership. Prior to the American colonial settlement of Florida, members of the Muskogean Creek, Yamassee, and Oconee tribes moved into Florida and repopulated the demographic vacuum created by the decimation of the original aboriginal inhabitants. These migrating groups of Native Americans became known as the Seminoles. They had an agriculturally based society, focusing upon cultivation of crops and the raising of horses and cattle. The material culture of the Seminoles remained similar to the Creeks, the dominant aboriginal pottery type being Chattahoochee Brushed. European trade goods, especially British, were common. The Creek settlement pattern included large villages located near rich agricultural fields and grazing lands.

Their early history can be divided into two basic periods: *colonization* (1716-1767) when the initial movement of Creek towns into Florida occurred, and *enterprise* (1767-1821) which was an era

of prosperity under the British and Spanish rule prior to the American presence (Mahon and Weisman 1996). The Seminoles formed at various times loose confederacies for mutual protection against the new American Nation to the north (Tebeau 1980:72). The Seminoles crossed back and forth into Georgia and Alabama conducting raids and welcoming escaped slaves. This resulted in General Andrew Jackson's invasion of Florida in 1818, which became known as the First Seminole War.

### **3.6 Territorial and Statehood**

Florida became a United States territory in 1821 due to the war and the Adams-Onís Treaty of 1819. Settlement was slow and scattered at that time. Andrew Jackson, named provisional governor, divided the territory into St. Johns and Escambia Counties. At that time, St. Johns County encompassed all of Florida lying east of the Suwannee River, and Escambia County included the land lying to the west. In the first territorial census in 1825, 317 persons reportedly lived in South Florida; by 1830 that number had risen to 517 (Tebeau 1980:134).

Even though the First Seminole War was fought in north Florida, the Treaty of Moultrie Creek in 1823, at the end of the war, was to affect the settlement of all of south Florida. The Seminoles relinquished their claim to the whole peninsula in return for an approximately four million acre reservation south of Ocala and north of Charlotte Harbor (Covington 1958; Mahon 1985:50). The treaty satisfied neither the Indians nor the settlers. The inadequacy of the reservation, the desperate situation of the Seminoles, and the mounting demand of the settlers for their removal, produced another conflict.

In 1823, Gadsden County was created from St. John's County, and the following year Mosquito County was created out of Gadsden. This new county included all of the Tampa Bay area and reached south to Charlotte Harbor (Historic Tampa/Hillsborough County Preservation Board [HT/HCPB] 1980:7). In 1824, Cantonment (later Fort) Brooke was established on the south side of the mouth of the Hillsborough River in what is now downtown Tampa by Colonel George Mercer Brooke. Frontier families followed the soldiers and the settlement of the Tampa Bay area began. This caused some problems for the military as civilian settlements were not in accord with the Camp Moultrie agreement (Guthrie 1974:10). By 1830, the U.S. War Department found it necessary to establish a military reserve around Fort Brooke with boundaries extending 16 miles to the north, west, and east (Chamberlin 1968:43). Within the military reservation were a guardhouse, barracks, storehouse, powder magazine, and stables.

By the early 1830s, governmental policy shifted in terms of relocating the Seminoles to lands west of the Mississippi River. Outrage at this policy of forced relocation resulted in the Second Seminole War (1835-1842). Following this conflict, the Seminoles who remained in Florida were driven further south, clearing the way for homesteaders. Hillsborough County was established in 1834 by the Territorial Legislature of Florida; it reached north to Dade City and south to Charlotte Harbor, encompassing an area that today comprises Pasco, Polk, Manatee, Sarasota, DeSoto, Charlotte, Highlands, Hardee, Pinellas, and Hillsborough counties. Due to its isolated location, Hillsborough County was slow to develop. The Tampa Bay post office was closed at this time and reestablished as "Tampa" on September 13, 1834 (Bradbury and Hallock 1962). As settlement in the area increased, so did hostilities with Native Americans. The growing threat of Seminole invasion to the civilians near the fort propelled them to sign a petition asking for military protection. Only 25 men signed the petition showing the meager settlement in the area (Brown 1999:46).

By 1835, the Second Seminole War was underway, triggered by an attack on Major Francis Langhorne Dade as he led a company of soldiers from Fort Brooke to Fort King (now Ocala). As part

of the effort to subdue Indian hostilities in Florida, military patrols moved into the wilderness in search of any Seminole concentrations. As the Second Seminole War escalated, attacks on isolated settlers and communities became more common. To combat this, the U.S. Army and Navy converged on southwest Florida attempting to seal off the southern portion of the Florida peninsula from the estimated 300 Seminoles remaining in the Big Cypress Swamp and Everglades (Covington 1958; Tebeau and Carson 1965).

In 1837, Fort Brooke became the headquarters for the Army of the South and the main garrison for the Seminole wars. It also served as a haven for settlers who left their farms to seek protection from the warring Seminoles (Piper et al. 1982). Several other forts, including Fort Alabama (later Fort Foster), Fort Thonotosassa, and Fort Simmons were established during the Seminole War years (Bruton and Bailey 1984). Their uses varied from military garrisons to military supply depots; others were built to protect the nearby settlers during Indian uprisings.

The Second Seminole War ended in 1842 when the federal government withdrew troops from Florida. Some of the battle-weary Seminoles were persuaded to emigrate to the Oklahoma Indian Reservation where the federal government had set aside land for their occupation. However, those who wished to remain were allowed to do so, but were pushed further south into the Everglades and Big Cypress Swamp. This area became the last stronghold for the Seminoles (Mahon 1985).

In 1840, the population of Hillsborough County was 452, with 360 of those residing at Fort Brooke (HT/HCPB 1980). Encouraged by the passage of the Armed Occupation Act in 1842, designed to promote settlement and protect the Florida frontier, settlers moved south through Florida. The Act made available 200,000 acres outside the already developed regions south of Gainesville to the Peace River, barring coastal lands and those within a two-mile radius of a fort. It stipulated that any family or single man over 18 able to bear arms could earn title to 160 acres by erecting a habitable dwelling, cultivating at least five acres of land, and living on it for five years. During the nine-month period the law was in effect, 1184 permits were issued totaling some 189,440 acres (Covington 1961a:48).

In 1845, the State of Florida was admitted to the Union, and Tallahassee was selected as the capital. To hasten settlement of central Florida, the U.S. government commenced the official surveys of public lands. In 1852, C.F. Hopkins surveyed Township 30 South, Range 18 East; no historic features were depicted on the Plat (State of Florida 1852b). The area around the three proposed construction parcels is described as third rate pine and palmetto, with mangrove marsh south of the Shoot House area (State of Florida 1852a:326-349).

Although the majority of Florida's Seminoles had been deported to the western territories by the end of Second Seminole War, a number of Seminoles remained in central and south Florida. In July 1849, an incident occurred at the Kennedy and Darling Store near Peas Creek (Peace River). A band of four Seminoles killed two men, and wounded William McCollough and his wife Nancy, before looting and burning the store. This incident created the "Indian Scare" of 1849 in central Florida and resulted in the federal government establishing a series of forts across the state (Brown 1991; Covington 1961b). In December 1855, the Third Seminole War, or the Billy Bowlegs War, started because of pressure placed on Native Americans remaining in Florida to migrate west. The war started when Seminole Chief Holatter-Micco, also known as Billy Bowlegs, and 30 warriors attacked an army camp killing four soldiers and wounding four others. The attack was in retaliation for damage done by several artillerymen to property belonging to Billy Bowlegs. This hostile action renewed state and federal interest in the final elimination of the Seminoles from Florida.

Military action was not decisive during the war; therefore, in 1858 the U.S. government resorted to monetary persuasion to induce the remaining Seminoles to migrate west. Chief Billy Bowlegs accepted \$5000 for himself and \$2500 for his lost cattle, each warrior received \$500, and \$100 was given to each woman and child. On May 4, 1858, the ship *Grey Cloud* set sail from Fort Myers with 123 Seminoles; stopping at Egmont Key, 41 captives and a Seminole woman guide were added to the group. On May 8, 1858, the Third Seminole War was declared over (Covington 1982).

Residents turned to citrus, tobacco, vegetables, and lumber to make their living. Cattle ranching served as one of the first important economic activities reported in the area. Mavericks left by the early Spanish explorers provided the source for the herds raised by the mid-eighteenth century “Cowkeeper” Seminoles. As the Seminoles were pushed further south during the wars, their cattle were either sold or left to roam. Settlers captured or bought the cattle and branded them for their own. By the late 1850s, the cattle industry of southwest Florida was developing on a significant scale. Hillsborough and Manatee Counties constituted Florida’s leading cattle production region. By 1860, Fort Brooke and Punta Rassa were major cattle shipping points for southwest Florida. During this period, Jacob Summerlin became the first cattle baron of southwestern Florida. Known as the “King of the Crackers,” Summerlin herds ranged from Ft. Meade to Ft. Myers (Covington 1957).

### **3.7 Civil War and Aftermath**

In 1861, Florida followed South Carolina’s lead and seceded from the Union in a prelude to the American Civil War. Florida had much at stake in this war as evidenced in a report released from Tallahassee in June of 1861. It listed the value of land in Florida as \$35,127,721 and the value of the slaves at \$29,024,513 (Dunn 1989:59). Even though the coast of Florida, including the port of Tampa, experienced a naval blockade during the war, the interior of the state saw very little military action (Robinson 1928:43). Many male residents abandoned their farms and settlements to join the Union army at one of the coastal areas retained by the United States government or joined the Confederate cow cavalry. The cow cavalry provided one of the major contributions of the state to the Confederate war effort by supplying and protecting the transportation of beef to the government (Akerman 1976). It was estimated that three-quarters of the beef supplied to the Confederacy from Florida came from Brevard and Manatee Counties (Shofner 1995). Summerlin originally had a contract with the Confederate government to market thousands of head a year at eight dollars per head. However, by driving his cattle to Punta Rassa and shipping them to Cuba, he received 25 dollars per head (Grismer 1946:83). Salt works along the Gulf Coast also functioned as a major contributor to the efforts of the Confederacy (Lonn 1965). Union troops stationed at Punta Rassa conducted several raids into the Peace River Valley to seize cattle and destroy ranches. In response, Confederate supporters formed the Cattle Guard Battalion, consisting of nine companies under the command of Colonel Charles J. Mannerlyn. The lack of railway transport to other states, the federal embargo, and the enclaves of Union supports and Union troops holding key areas such as Jacksonville and Ft. Myers prevented an influx of finished materials. Additionally, federal gunboats blockaded the mouth of the larger rivers throughout the state preventing the shipment of raw materials. The war lasted until 1865.

In general, the Civil War years were marked by a deterioration of the local economy. However, by the late 1870s, normalcy was restored. Population increased in eastern Hillsborough County, and during the 15 years following the Civil War, several villages developed into substantial communities. These included Cork and Shiloh, two miles to the south of Cork. Shiloh’s best years appear to have been in the early 1880s, prior to the construction of the railroad from Sanford to Tampa, which gave birth to Plant City. With the emergence of Plant City, Shiloh’s businesses and churches moved south. According to Bruton and Bailey (1984:58), all that remains of the Shiloh community today is the historic cemetery.



Immediately following the war, the South underwent a period of “Reconstruction” to prepare the Confederate states for readmission to the Union. The program was administered by the U.S. Congress, and on July 25, 1868, Florida officially returned to the Union (Tebeau 1980:251). Civilian activity slowly resumed a normal pace after recovery from wartime depression, and the population continued to expand. The 1866 Homestead Act was passed to encourage settlement. The act allowed freedmen and loyal United States citizens to receive 80-acre tracts in Florida and the other four public land states of the South. Former Confederates were not eligible to receive homesteads under the Act until 1876 when the lands were open to unrestricted sale (Tebeau 1980:266, 294). The Homestead Act encouraged growth and settlement during the Reconstruction era.

The post-war economic conditions of much of the rest of the South contributed to changes in the economy of the Tampa Bay area and communities to the south along the Gulf Coast. Post-war cattle shipments to Cuba varied considerably with changes in Cuban demand and the institution of a duty. The net result of Reconstruction-period cattle shipping was the movement of ranges and cattlemen farther south, closer to Charlotte Harbor and the Caloosahatchee River (Brown 1991:199). An influx of poor farmers, coinciding with the southward movement of cattle ranches, made the economic stability of the area dependent upon reliable sources of overland freight transport (Mormino and Pizzo 1983:68). During the 1870s and 1880s, the economy boomed with a number of winter visitors seeking the favorable subtropical climate, and an increase of agricultural production with the introduction of truck farming of tomatoes, cucumbers, and beans, as well as experimentation with oranges and lemons. Cattle continued to play a major role in the inland areas.

The State of Florida faced a financial crisis involving title to public lands in the early 1880s. By Act of Congress in 1850, the federal government turned over to the states for drainage and reclamation all “swamp and overflow land.” Florida received approximately ten million acres. To manage that land and the five million acres the state had received on entering the Union, the Florida legislature created the Board of Trustees of the Internal Improvement Fund in 1851. In 1855, the legislature set up the trust fund in which state lands were to be held. The Fund became mired in debt after the Civil War, and under state law, no land could be sold until the debt was cleared. In 1881, the Trustees started searching for someone to buy enough state land to pay off the Fund’s debt to permit sale of the remaining millions of acres that it controlled.

By 1881, Hamilton Disston, a member of a prominent Pennsylvania saw manufacturing family and friend of then Governor William Bloxham, had entered into agreement with the State of Florida to purchase four million acres of swamp and overflowed land for one million dollars. In exchange for this, he promised to drain and improve the land. Disston’s land holding company was the Florida Land and Improvement Company (FLIC). He and his associates also formed the Atlantic and Gulf Coast Canal and Okeechobee Land Company in 1881 (Davis 1939:205). This company was established as part of the drainage contract with the State. This contract provided one-half of the acreage that they could drain, reclaim, and make fit for cultivation. The Disston Purchase enabled the distribution of large land subsidies to railroad companies, inducing them to begin extensive construction. Disston and the railroad companies in turn sold smaller parcels of land to developers and private investors (Tebeau and Carson 1965:252). Disston sold half of his contract to the British Florida Land and Mortgage Company, headed by Sir Edward James Reed, in 1882 (Tischendorf 1954). This was done to cover the second payment on the Purchase since Disston’s assets had been tied up in the drainage contract. The FLIC obtained title to the lands that contained the Construct Warehouse District and Demo/Construct Vehicle Operations Facility parcels; the Shoot House parcel was within the lands purchased by Sydney J. Wailes (State of Florida n.d.:17-18).

The first significant influence on the growth of Hillsborough County as a whole was the investment of capital in railroad construction during the 1880s. Such activity was encouraged by the

State of Florida, which granted sizeable amounts of land to the railroad companies. In general, railroad development increased access, stimulated commerce, and promoted tourism, thus resulting in population growth and economic prosperity. The South Florida Railroad constructed a line from Tampa to the southwest coast of the Interbay Peninsula at Black Point or Passage Point in 1887 (Florida Southern Railway Company 1888). The terminus became known as Port Tampa. This area became an important locus for marine commerce and shipbuilding. By 1891, 205 ships brought 136,000 tons of goods to the port. Cigar factories, two hotels, stores and residences for the railroad workers, hotel staff, and port workers were constructed (Woodfin n.d.).

The Spanish American War, in 1898, brought millions of dollars and many troops to Tampa. Tampa was the United States' nearest shipping point for the war effort in Cuba. Consequently, it was the designated departure point for the troops. Henry Plant's Tampa Bay Hotel became the headquarters of the Army (Evans 1972). Port Tampa had been selected as the debarkation point for the War, and Teddy Roosevelt and his staff stayed in several houses at the Port (Woodfin n.d.). Troops began arriving in April of 1898 and by May of that year, they outnumbered residents two to one (Friedel 1985; Grismer 1950). By early June, an estimated 20,000 troops had shipped out to Cuba with thousands more waiting. However, the war ended on July 5, and by the end of August, the troops were gone and Tampa returned to normal.

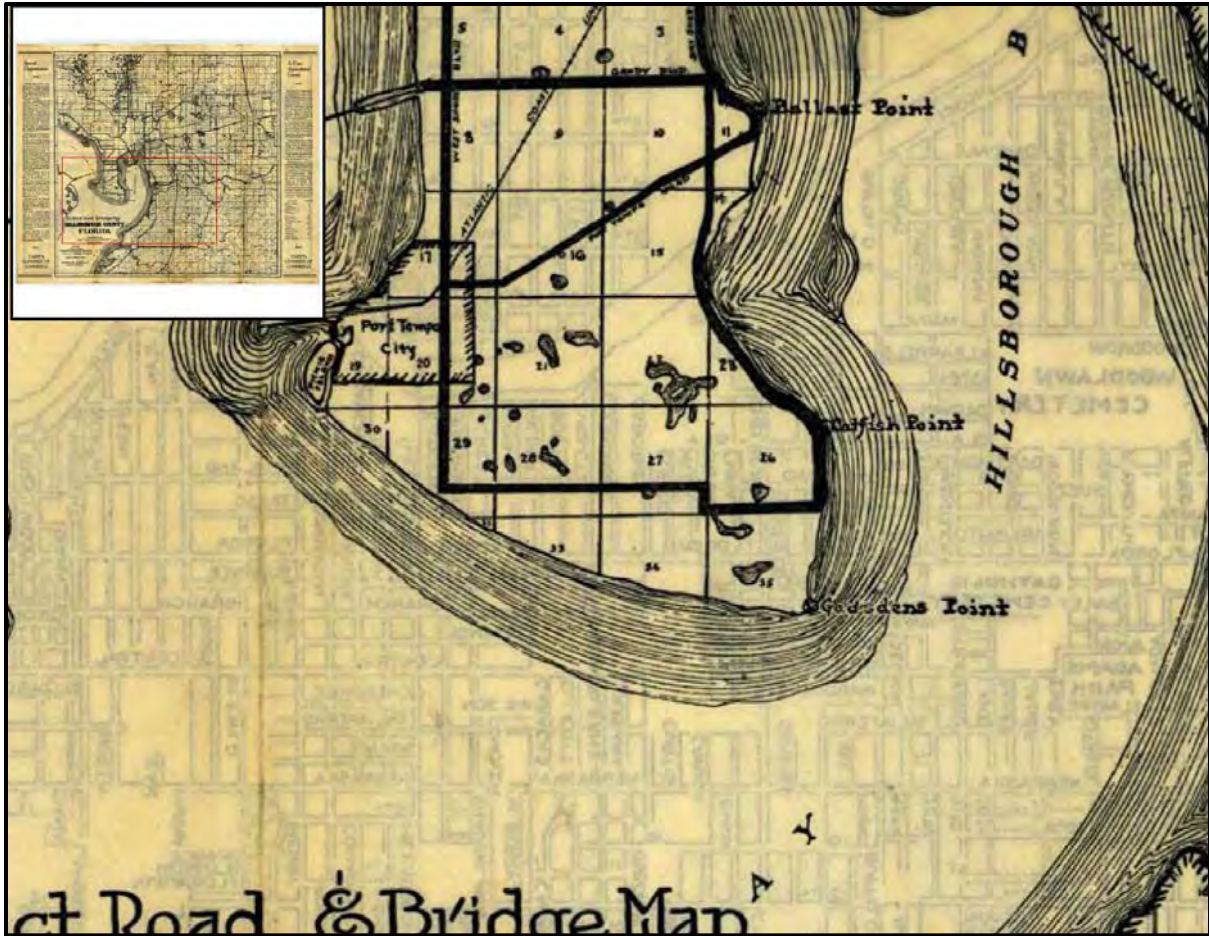
### **3.8 Twentieth Century**

The turn of the century prompted optimism and an excitement over growth and development. A north/south connector from Tampa to Miami significantly opened up the region. In 1915, a group of businesspersons met to discuss the feasibility of a cross-state highway from Tampa to Miami by way of Sarasota. A portion of this route, stretching from the Hillsborough county line to Sarasota, was constructed with the passage of a bond issue in 1911. This road was eventually designated as US 41, or the Tamiami Trail, but was not completed until 1928 (Scupholm 1997). Developers used propaganda promoting Florida as the eternal garden to attract tourists and new residents.

In 1917, the Tampa Southern Railroad was organized, and construction began a year later. It was initially constructed to provide for transportation of agricultural produce and industrial goods from Manatee County to Tampa (Turner 2005). This line became part of the Atlantic Coast Line Railroad in the early 1920s, and by 1925, the line had been extended from Palmetto and Bradenton southward to Sarasota and Fort Myers (Turner 2003).

The great Florida Land Boom of the 1920s saw widespread development of towns and highways. Several reasons prompted the boom, including the mild winters, the growing number of tourists, the larger use of the automobile, the completion of roads, the prosperity of the 1920s, and the promise by the state legislature never to pass state income or inheritance taxes. The 1927 Hillsborough County Road map shows several roads on the Interbay Peninsula as well as the location of Port Tampa City and the Atlantic Coast Line Railroad, which had been the Florida Southern Railroad (County Engineering Department 1927) (**Figure 3.2**).

Signs of growth were halted by the end of the Florida Land Boom and the Great Depression hit Florida earlier than the rest of the nation. By 1926-27, the bottom fell out of the Florida real estate market. Massive freight car congestion from hundreds of cars loaded with building materials sitting idle in the railroad yards caused the Florida East Coast Railway to embargo all but perishable goods in August of 1925 (Curl 1986). The embargo spread to other railroads throughout the state, and, as a result, most construction halted.



**Figure 3.2.** 1927 road and bridge map showing the Interbay Peninsula and Port Tampa City.

The 1926 real estate economy in Florida was based upon such wild land speculations that banks could not keep track of loans or property values (Eriksen 1994:172). By October, rumors were rampant in northern newspapers concerning fraudulent practices in the real estate market in south Florida. Confidence in the Florida real estate market quickly diminished and the investors could not sell lots (Curl 1986). To make the situation even worse, two hurricanes hit south Florida in 1926 and 1928. The 1928 hurricane created a flood of refugees fleeing northward. The following year, in 1929, the Mediterranean fruit fly invaded and paralyzed the citrus industry creating quarantines and inspections that further slowed an already sluggish industry.

The 1930s saw the closing of mines and mills and widespread unemployment. This included the cigar industry of nearby Tampa, the area's economic backbone for a half century, which was severely impacted. Several cigar factories closed, eleven cigar firms moved, and three merged into one (Campbell 1939). In the mid-1930s, the New Deal programs of Franklin D. Roosevelt's administration were aimed at pulling the nation out of the Depression, and Hillsborough County did benefit from these with the Public Works Administration's projects (Lowry 1974). In 1935, the southern portion of the Interbay Peninsula was purchased by the Army for an air base under the Wilcox National Air Defense Act of 1935. Tampa was selected because of the favorable climate, the lack of land access, obstruction free approach and safe place to jettison aircraft in the event of a crash landing, the well-developed infra-structure, and extensive lobbying (MacDill AFB 2003). Construction of the Army Air Field (AAF) began in November 1939, and four months later, troops were arriving from New York and Louisiana. A review of the aerial photographs available from the

Publication of Archival Library & Museum Materials (PALMM) revealed that in 1938, the Construct Warehouse District tract was in an area undergoing development (several dirt roads were in place), but the tract itself had no structures on it (**Figure 3.3**). The other two parcels were in the middle of open pineland. Numerous drainage ditches had been excavated across the peninsula and several road were in place (USDA 1938).

The new field became the center for training Black troops under a “separate but equal” policy. The members were assigned to aviation squadrons, engineering companies, and ordnance units. MacDill AAF was officially activated on April 16, 1941, becoming the headquarters for the III Bomber Command and the III Fighter Command (Gerrell 1996). Throughout the war, the base was continually upgraded and expanded to accommodate the U.S.’s growing military role. This included the construction of hangars, runways, taxiways, housing, and recreational/service facilities (mess halls, theater, enlisted men’s club, chapels, bank, civilian cafeteria, library and laundry), among other structures such as offices, communication facilities, photo labs, warehouses, and control towers (MacDill AFB 2003).

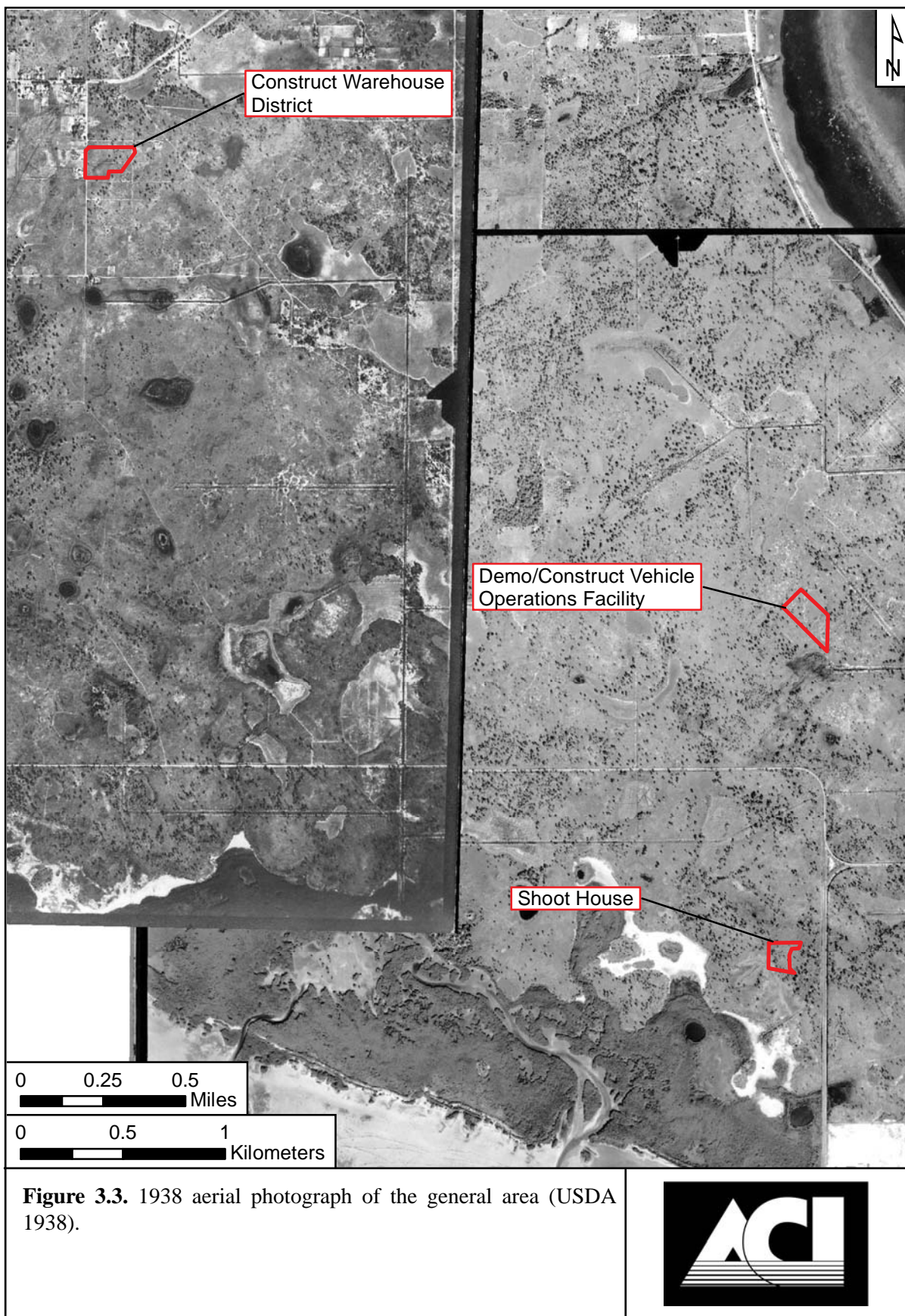
The first mission of MacDill AAF was the transitional training of aircrews in the B-17 Flying Fortress long-range bomber and in the B-26 Marauder medium-range bomber. During its first three years, the AAF housed the 29<sup>th</sup>, 44<sup>th</sup>, and 21<sup>st</sup> Bombardment Groups (Patterson et al. 1994). MacDill AAF served as a staging point for sending combat aircraft to the Far East because of the attack on Pearl Harbor. Project X was initially conducted from MacDill, but was later transferred to Morrison Field as it could have compromised MacDill’s training mission. Project X called for the servicing of aircraft and briefing crews for the flight to Australia in support of the Philippines (Wang et al. 1994).

The beginning of 1946 saw the Strategic Air Command (SAC) assume command of MacDill AAF, with the 6<sup>th</sup> Air Division, the 311<sup>th</sup> Air Reconnaissance Wing, the 55<sup>th</sup> Reconnaissance Group, and the 307<sup>th</sup> Bombardment Wing being transferred to the base. During this time, MacDill introduced a modern assembly-line training program called Operational Training Units to respond to the need for more trained pilots. Two years later, the name was changed to MacDill Air Force Base after the official formation of the U.S. Air Force in 1947 (MacDill AFB 2003).

It was not until World War II that the local economy recovered, along with the rest of the state. Federal roads, channel building, and airfield construction for the wartime defense effort brought many workers into the Tampa area. As World War II ended, Hillsborough County, like most of Florida, experienced a population boom in the 1950s. According to the U.S. Census Bureau (USCB), Florida’s population increased from 1,897,414 in 1940 to 2,771,305 in 1950 (Forstall 1995). In 1949, Sen. Kenneth Wherry of Nebraska introduced a bill to help solve the family housing problem at military establishments because the military continued to expand with the threat of Communism (MacDill AFB 2003). After the war, car ownership increased, making the American public more mobile. Tourism, along with corporate investments, developed as one of the major industries for the Tampa Bay area. Many who had served at Florida’s military bases during World War II also returned with their families to live. As veterans returned, the trend in new housing focused on the development of small tract homes in new subdivisions.

In the 1960s, construction of I-75 and I-4 began, generating a spurt of activity that has continued into the 21<sup>st</sup> century. Completion of I-275 provided convenient access within the metropolitan Tampa area. Throughout the last fifty years, commercial development, including tourist attractions such as Busch Gardens, restaurants, and hotels, have exploded along the interstate system, keeping tourism as a primary revenue source in Florida.



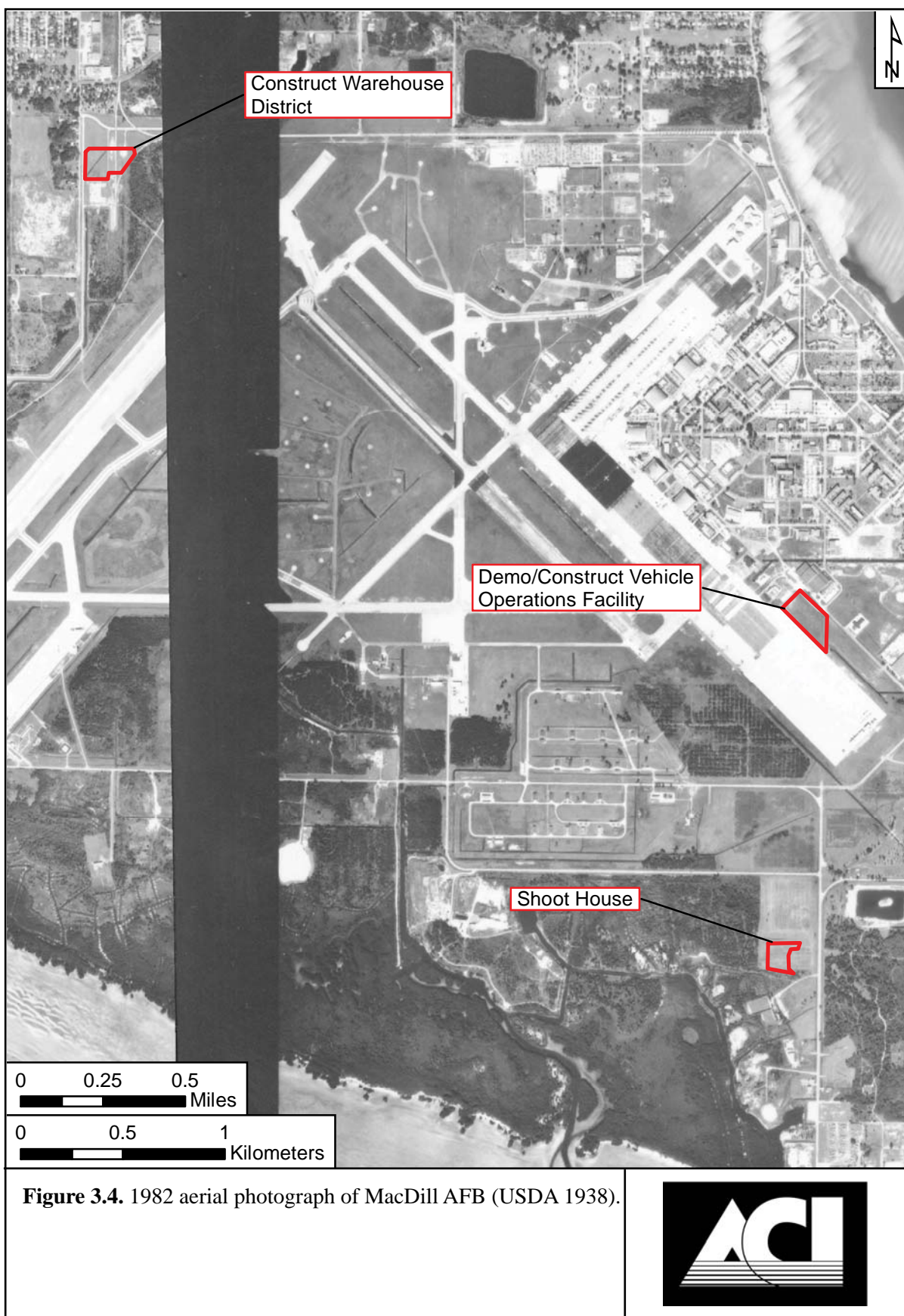


**Figure 3.3.** 1938 aerial photograph of the general area (USDA 1938).

MacDill AFB has also continued to expand and develop. No aerials are readily available from the 1950s, but by 1982, the Shoot House area was a planted field, and the other two parcels were adjacent to development areas (**Figure 3.4**) (USDA 1982). In 1961, the U.S. Strike Command headquarters was established at MacDill to coordinate the efforts of the different military branches when responding to global events that required military action. The AFB almost shut down in 1962 until the Cuban Missile Crisis began, which made clear just how important MacDill's location was to protecting U.S. interests in the Caribbean (MacDill AFB 2003). Since then, MacDill AFB has continued to be a major training facility.

With the population explosion in Hillsborough County, the character of the area has changed dramatically. By 1970, development of residential communities was well underway throughout the region. By 2010, the population of Hillsborough County totaled 1,229,226, making the county the fourth most populous in the state (USCB 2013). The largest employers are in the retail trade, services, and government sectors. Hillsborough, Hernando, Pasco, and Pinellas Counties have been designated as the Tampa-St. Petersburg-Clearwater Metropolitan Area. Most of the population is centered on Tampa Bay and the Gulf Coast, although the interior lands are increasingly becoming developed.

Between 1991 and 1993, MacDill AFB transferred over 100 F-16s to Luke AFB since the Defense Base Closure and Realignment Commission directed them to cease all flying operations by 1991. However, the National Oceanic and Atmospheric Administration moved to MacDill in 1993 to utilize the runway, and since then, the base has become home to the 6<sup>th</sup> Air Base Wing, with a primary mission of supporting the U.S. Central Command and the U.S. Special Operations Command (MacDill AFB 2003). The 6th Air Mobility Wing is comprised of the 6th Operations Group, the 6th Maintenance Group, the 6th Mission Support Group and the 6th Medical Group. In addition to the 6th Air Mobility Wing, MacDill is also home to 28 mission partners, including U.S. Central Command and U.S. Special Operations Command. The presence of these two unified commands and other mission partners creates a unique multi-service community at MacDill, with all branches of the armed forces represented. So, although MacDill is an Air Force Base, it is also home to many soldiers, sailors, Marines and coast guardsman (6th Air Mobility Wing 2015).



**Figure 3.4.** 1982 aerial photograph of MacDill AFB (USDA 1938).





## 4.0 BACKGROUND RESEARCH AND METHODS

A Research Design, prepared prior to initiating fieldwork, delineated project goals and strategies. It also summarized the results of background research, which served to generate an informed set of expectations concerning the kinds of sites which might be anticipated to occur within the three proposed construction parcels, and also provided a basis for evaluating any new sites discovered. Preliminary research consisted of a comprehensive review of archaeological and historical literature, records, and other documents and data pertaining to the project area. This included a review of the sites listed in the NRHP, the FMSF (October 2015 GIS update), published books and articles, and cultural resource survey reports. In addition to the FMSF, other data relative to the background research were obtained from the files of ACI.

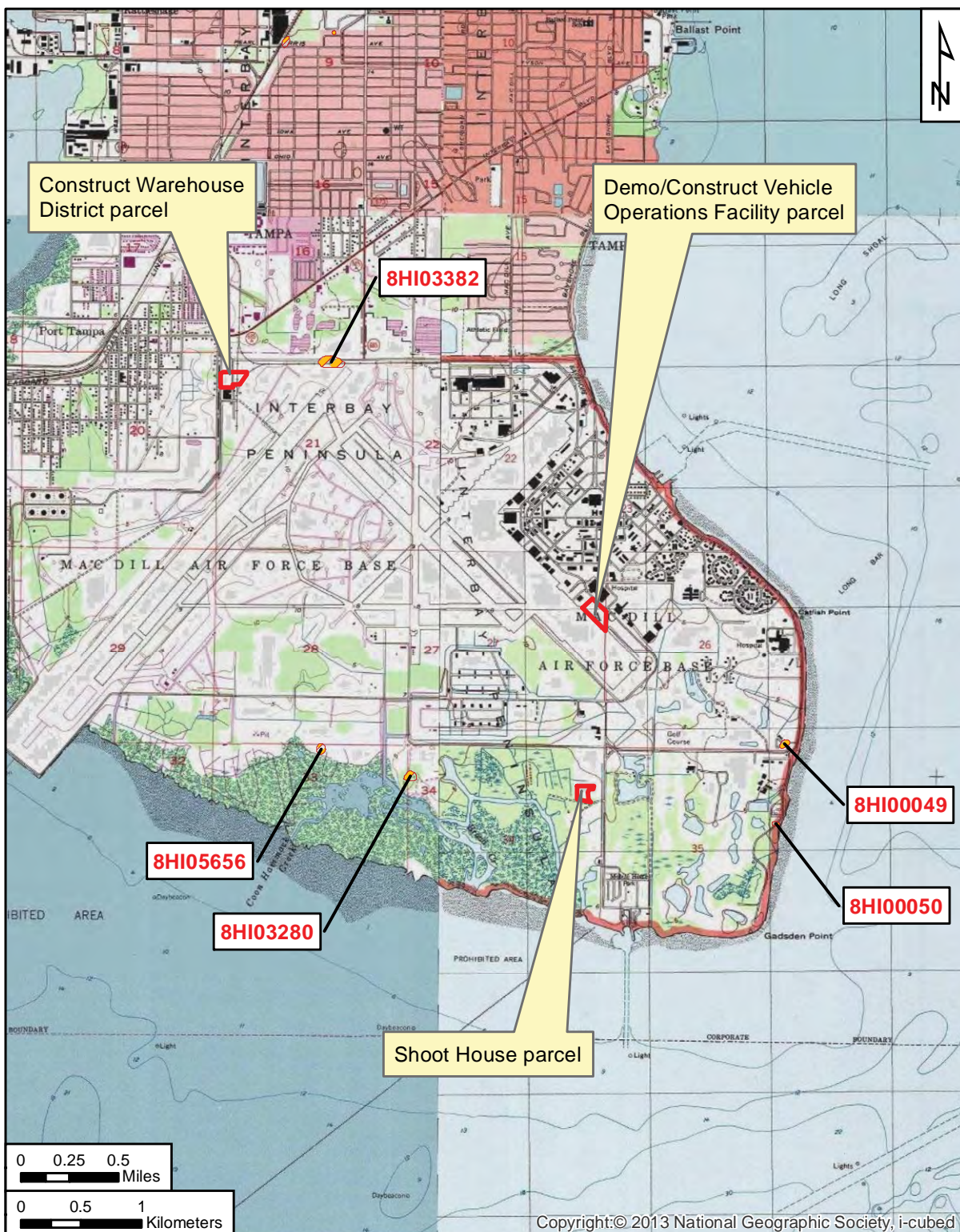
### 4.1 Background Research

There are five previously recorded archaeological sites within MacDill AFB (**Table 4.1, Figure 4.1**). 8HI00049 and 8HI00050 were recorded by William Plowden in the early 1950s (FMSF). 8HI00049, a sand mound, was destroyed during construction of the golf course. It has not been evaluated in terms of NRHP eligibility by the State Historic Preservation Officer (SHPO). 8HI00050 is a shell midden and artifact scatter dating from the Manasota and Weeden Island periods. Phase II testing was conducted at the site in 1996. As a result, the SHPO determined this site eligible for listing in the NRHP (Gerrell 1996). Coon Creek Hammock was recorded during the reconnaissance survey conducted by the NPS (Ehrenhard 1987). It was not considered significant by the recorder, and has not been evaluated by the SHPO. 8HI03382, the MacDill AFB Runway Site, was recorded during the survey for a natural gas pipeline. Phase II testing resulted in the site being considered eligible for inclusion in the NRHP; the SHPO concurred (Chance 1988; Chance and Smith 1991). The EOD Site, 8HI05656, was recorded based on surface reconnaissance by Air Force personnel; Phase II testing of the site indicated that it was not eligible for listing in the NRHP (Gerrell 1996).

**Table 4.1.** Previously recorded archaeological sites within MacDill AFB.

| FMSF #   | SITE NAME             | SITE TYPE                                            | CULTURE                                     | REFERENCE                                                     | SHPO EVAL     |
|----------|-----------------------|------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------|---------------|
| 8HI00049 | NN                    | Sand mound;<br>destroyed                             | Indeterminate                               | Ehrenhard 1987;<br>FMSF                                       | Not Evaluated |
| 8HI00050 | NN                    | Shell mound;<br>artifact scatter;<br>historic refuse | Manasota,<br>Weeden Island;<br>20th century | Brooks et al. 1983;<br>Ehrenhard 1987;<br>FMSF ; Gerrell 1996 | Eligible      |
| 8HI03280 | Coon Creek<br>Hammock | shell midden;<br>artifact scatter                    | Post-Archaic                                | Ehrenhard 1987                                                | Not Evaluated |
| 8HI03382 | MacDill AFB<br>Runway | Artifact scatter                                     | Archaic                                     | Chance 1988; Chance<br>and Smith 1991                         | Eligible      |
| 8HI05656 | EOD                   | Lithic scatter                                       | Late Archaic                                | Gerrell 1996                                                  | Ineligible    |

In addition to the above-mentioned work, there have been numerous cultural resources investigations conducted within one mile of the three proposed construction parcels (**Table 4.2**). These include surveys for utilities and natural gas lines, transportation projects, cell towers, golf course improvements, and architectural surveys of MacDill AFB and surrounding neighborhoods. In addition, an integrated cultural resources management plan was prepared for MacDill AFB in 2006, effective through 2010 (engineering-environmental Management 2006).



**Figure 4.1.** Location of the five previously recorded archaeological sites within MacDill AFB (USGS Port Tampa and Gibsonton, 1982).





**Table 4.2.** Cultural resources investigations proximate to the three MacDill construction parcels.

| REFERENCE                   | PROJECT                                                                                                                                                                                                                 | # of Newly Recorded Resources | # of Previously Recorded Resources |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------|
| Miller 1979                 | A Preliminary Archaeological and Historical Survey of the Tampa-Hillsborough 201 Plan                                                                                                                                   | 10                            | 3                                  |
| Ehrenhard 1987              | Cultural resources reconnaissance, MacDill Air Force Base, Florida.                                                                                                                                                     | 1                             | 2                                  |
| HT/HCPB 1987                | Historic resources survey: Tampa.                                                                                                                                                                                       | 871                           | 0                                  |
| Brooks et al. 1983          | An Archaeological Survey of Designated Areas within the Proposed MacDill Air Force Base 18 Hole Golf Course Hillsborough County, Florida                                                                                |                               |                                    |
| Chance 1988                 | Addendum To: The Phase I Archaeological Assessment of a Florida Gas Transmission Company Proposed Corridor Expansion Project                                                                                            | 2                             | 0                                  |
| Chance and Smith 1991       | A Phase II Investigation of Six Archaeological Sites in Florida (8Gu84, 8Ja551, 8Mr1878, 8Po1037, 8Po1038, and 8Hi3382) for the Florida Gas Transmission Company                                                        | 0                             | 6                                  |
| Wang et al. 1994            | Historic Building Survey for MacDill Air Force Base Florida                                                                                                                                                             | 51                            | 0                                  |
| Gerrell 1996                | MacDill Air Force Base National Register Eligibility Recommendations for Sites 8HI50 and 8HI5656                                                                                                                        | 0                             | 2                                  |
| Maio et al. 1998            | Hillsborough County Historic Resources Survey Report                                                                                                                                                                    | 147                           | 286                                |
| Janus Research 2001         | Tampa Rail Project, Cultural Resource Reconnaissance Study                                                                                                                                                              | 0                             | 48                                 |
| Deming 2001                 | Proposed Cellular Tower Site: Port Tampa (FL-440-028) 7208 S. Elliot Street, Tampa, Hillsborough County, Florida                                                                                                        | 0                             | 48                                 |
| Spriggs et al. 2002         | Architectural Survey of Port Tampa and Ballast Point/Interbay Neighborhoods in the City of Tampa, Hillsborough County, Florida                                                                                          | 159                           | 51                                 |
| MacDill AFB 1996            | Final Wherry Housing Historic Building Inventory Evaluation MacDill AFB, Florida                                                                                                                                        | 28                            | 0                                  |
| Archambeault and Quinn 2004 | An Archaeological and Historical Survey of the Proposed G554B/Landcare Tower Location in Hillsborough County, Florida                                                                                                   | 0                             | 0                                  |
| Goodfellow et al. 2006      | Architectural Resources Survey at MacDill Air Force Base, Florida                                                                                                                                                       | 93                            | 0                                  |
| Gougeon 2010                | FA10143830 Collocation ("Co") Submission Packet FCC Form 621                                                                                                                                                            | 0                             | 1                                  |
| Scherer 2012                | Environmental Assessment for Ecosystem Restoration Masterplan, Endangered Species Study, and Cultural Resources Study, MacDill AFB, Florida                                                                             | 20                            | 0                                  |
| Mikell 2012                 | An Archaeological and Historical Survey of the MacDill AFB South Water Tower TA70XC010 in Hillsborough County, Florida FCC Form 621                                                                                     | 0                             | 1                                  |
| James et al. 2011           | Update of Tampa Harbor Dredged Material Management Plan (DMMP) and Preparation of an Environmental Assessment (EA) and Cultural Resources Assessment Survey (CRAS) with Fish and Wildlife Coordination Act Report (CAR) | 0                             | 0                                  |

As archaeologists have long realized, aboriginal populations did not select their habitation sites and special activity areas in a random fashion. Rather, many environmental factors had a direct influence upon site location selection. Variables such as soil drainage, distance to freshwater, relative topography, and proximity to food and other resources, including stone and clay, have proven to be good site indicators, especially in the inland areas. The Air Force has determined that the Shoot House parcel has a high archaeological potential while the Construct Warehouse District and Demo/Construct Vehicle Operations Facility parcels have a low archaeological potential.

A review of the 19<sup>th</sup> century Federal surveyor's data indicates that there was no development of the property in 1852, when C.F. Hopkins surveyed the section lines of Township 30 South, Range 18 East (State of Florida 1852b). He described the area around the construction parcels as 3<sup>rd</sup> rate pine and palmetto, with mangrove marsh south of the Shoot House (State of Florida 1852a:326-349). The Construct Warehouse District and the Demo/Construct Vehicle Operations Facility areas were initially deeded to the Florida Land and Improvement Company (1882) and the Shoot House parcel was purchased by Sydney J. Wailes in 1885 (State of Florida n.d.:17-18). Based on these data, the potential for archaeological sites of the historic period appeared to be low in all proposed construction parcels.

## **4.2 Field Methods**

The archaeological field survey consisted of surface reconnaissance combined with systematic and judgmental subsurface testing. In accordance with DHR standards, the high probability area (Shoot House parcel) was systematically tested at 25 m (82 ft) intervals. The other two parcels were considered to have low archaeological potential and were tested at 100 m (330 ft) intervals. Shovel tests were circular and measured 50 centimeters (cm) (20 inches [in]) in diameter by at least 1.0 m (39 in) in depth. The soil removed from the shovel tests was screened through 0.64 cm (0.25 in) mesh hardware cloth to assure the recovery of all artifacts.

The locations of all shovel tests was plotted on appropriate maps and following the recording of relevant data such as environmental setting, stratigraphic profile, and artifact finds, all shovel tests were backfilled and the soil compacted to the extent that they do not present a tripping hazard. Recorded shovel test data included date, crew designation, parcel number, shovel test number, stratigraphy, depth of artifact recovery (if any), and local environmental setting. Shovel test locations were recorded with a Trimble Geo-XT.

## **4.3 Unexpected Discoveries**

No human burial sites such as Indian mounds, lost historic and aboriginal cemeteries, or other unmarked burials or associated artifacts were inadvertently discovered during the field survey.

## **4.4 Analysis, Collections Management, and Curation**

Since no cultural materials were recovered, no laboratory analysis was needed. The field notes, photos, and other project documentation will be maintained at ACI in Sarasota (P15144), unless the client requests otherwise.

## 5.0 RESULTS AND RECOMMENDATIONS

### 5.1 Archaeological Results

Each of the three proposed construction sites was initially subjected to ground surface reconnaissance. This was followed by systematic and judgmental shovel testing. To the extent possible, shovel tests were placed in pre-determined locations. Slight adjustments were made in the field to avoid marked utilities. No surface cultural materials were observed in any of the parcels, and all 38 shovel tests were devoid of cultural materials. Thus, no archaeological sites or isolated cultural materials are associated with the Shoot House, Demo/Construct Vehicle Operations Facility, and Construct Warehouse District parcels. A summary of findings for each area follows.

**Shoot House Project Site:** This 3.0-acre proposed construction parcel, historically used as an irrigation spray field for the wastewater treatment plant, was identified as a high probability zone. Ground surface inspection indicated some irrigation equipment parts, but no aboriginal or historic cultural materials. The property has a ground cover of briars, weeds, and grasses, some Brazilian pepper, young palms and myrtle, as well as oaks and pines along the southern property boundary. The existing conditions are shown in **Photo 5.1** and **Photo 5.2**. The parcel was subjected to systematic subsurface shovel testing at 25 m (82 ft) intervals along parallel transects spaced 25 m (82 ft) apart (**Figure 5.1**). Twenty-four shovel tests were excavated. As a result, no cultural materials were found. The typical stratigraphic profile is an upper zone of gray sand from 0-30 cm (0-12 in), underlain by successive strata of very light grayish tan sand between 30-60 cm (12-24 in) and dark brown sand at 60-100 cm (24-40 in). Water intrusion was observed at 90 cm (36 in). One shovel test was terminated at 50 cm (20 in) due to an obstruction, and nine tests were ended at 65-80 cm below surface (26-32 in) due to the presence of very compact, wet hardpan.



**Photo 5.1.** Existing conditions within the Shoot House parcel, looking northwest.







**Photo 5.2.** Existing conditions near the south boundary of the Shoot House parcel, looking northwest.

**The Demo/Construct Vehicle Operations Facility Project Site:** This approximately 5.6-acre proposed construction parcel was considered to have a low potential for archaeological site occurrence. The property was reportedly never used, but appears to be disturbed as the result of underground electrical, gas, and cable line installations. It is now maintained lawn. The existing conditions are shown in **Photo 5.3** and **Photo 5.4**. This parcel was systematically tested at 100 m (328 ft) intervals, supplemented with three judgmentally placed shovel tests (Figure 5.2). Of the total eight shovel tests (**Figure 5.2**), all yielded negative results. No surface cultural materials were observed. The typical stratigraphic profile consists of an upper zone of gravelly brown sandy fill from 0-25 (0-10 in), underlain by successive strata of mottled gray sand at 25-50 cm (10-20 in), very light gray sand at 50-80 cm (20-32 in), and brown sand at 80-100 cm (32-40 in). Three shovel tests were terminated prior to 100 cm below surface (40 in) due to impenetrable fill materials.



**Photo 5.3.** Existing conditions within the Demo/Construct Vehicle Operations Facility parcel, looking north.



**Photo 5.4.** Existing conditions within the Demo/Construct Vehicle Operations Facility parcel, including the location of utilities, looking southeast.





**Figure 5.2.** Location of the shovel tests within the Demo/Construct Vehicle Operations Facility parcel.



**The Construct Warehouse District Project Site:** This proposed construction parcel, which measures approximately 5.5 acres, was considered to have a low archaeological site potential. This land has never been used, but has been disturbed by previous base activities and the installation of underground utilities, ditching, and the removal of contaminated soil in the eastern portion of the parcel. A paved road bisects the property. Most of the land is now maintained lawn and used for equipment storage. A metal open shed is located in the southeast part of the property. The existing conditions are shown in **Photo 5.5** and **Photo 5.6**. Following ground surface inspection, which yielded negative results, this parcel was systematically tested at 100 m (328 ft) intervals, and supplemented by one judgmental test. The testing strategy was designed to avoid utilities and contaminated soil areas. The total six shovel tests (**Figure 5.3**) were devoid of cultural materials. The typical stratigraphic profile observed consisted of an upper zone of dark gray brown mottled sand from 0-40 cm (0-16 in), underlain by successive strata of light gray sand at 40-65 cm (16-26 in), and brown sand at 65-100 cm (26-40 in). Water intrusion was observed at 90 cm (36 in).



**Photo 5.5.** Existing conditions within the Construct Warehouse District parcel, looking northeast.





**Figure 5.3.** Location of the shovel tests within the Construct Warehouse District parcel.





**Photo 5.6.** Eastern part of the Construct Warehouse District parcel showing sheds and marked utility line (pink flagged pins), looking north.

## **5.2 Conclusions and Recommendations**

The background research revealed an absence of previously recorded archaeological sites and historic resources within the three proposed construction parcels. No new archaeological sites were located during the field survey. Therefore, no archaeological sites or historic resources that are listed, eligible, or considered potentially eligible for listing in the NRHP will be affected by the proposed undertaking. No further archaeological investigations are recommended.

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## **APPENDIX**

### Survey Log

Ent D (FMSF only) \_\_\_\_\_



# Survey Log Sheet

Florida Master Site File  
Version 4.1 1/07

Survey # (FMSF only) \_\_\_\_\_

Consult *Guide to the Survey Log Sheet* for detailed instructions.

## Identification and Bibliographic Information

Survey Project (name and project phase) CRAS Three Construction Sites MacDill AFB, Hillsborough Co.

Report Title (exactly as on title page) Phase I Archaeological Survey of Three Construction Sites at MacDill Air Force Base in Hillsborough County, Florida

Report Authors (as on title page, last names first) 1. ACI 3. \_\_\_\_\_  
2. \_\_\_\_\_ 4. \_\_\_\_\_

Publication Date (year) 2015 Total Number of Pages in Report (count text, figures, tables, not site forms) 47

Publication Information (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*.)  
P15144, ACI, Sarasota.

Supervisors of Fieldwork (even if same as author) Names Deming, Joan

Affiliation of Fieldworkers: Organization Archaeological Consultants Inc City Sarasota

Key Words/Phrases (Don't use county name, or common words like *archaeology, structure, survey, architecture, etc.*)

1. MacDill AFB 3. \_\_\_\_\_ 5. \_\_\_\_\_ 7. \_\_\_\_\_  
2. \_\_\_\_\_ 4. \_\_\_\_\_ 6. \_\_\_\_\_ 8. \_\_\_\_\_

Survey Sponsors (corporation, government unit, organization or person directly funding fieldwork)

Name Akima Facilities Management

Organization \_\_\_\_\_

Address/Phone/E-mail PO Box 6350, Tampa, FL 33608-0350

Recorder of Log Sheet Horvath, Elizabeth A.

Date Log Sheet Completed 12-8-2015

Is this survey or project a continuation of a previous project? ☒ No ☐ Yes: Previous survey #s (FMSF only) \_\_\_\_\_

## Mapping

Counties (List each one in which field survey was done; attach additional sheet if necessary)

1. Hillsborough 3. \_\_\_\_\_ 5. \_\_\_\_\_  
2. \_\_\_\_\_ 4. \_\_\_\_\_ 6. \_\_\_\_\_

USGS 1:24,000 Map Names/Year of Latest Revision (attach additional sheet if necessary)

|                           |                  |               |            |
|---------------------------|------------------|---------------|------------|
| 1. Name <u>PORT TAMPA</u> | Year <u>1982</u> | 4. Name _____ | Year _____ |
| 2. Name <u>GIBSONTON</u>  | Year <u>1982</u> | 5. Name _____ | Year _____ |
| 3. Name _____             | Year _____       | 6. Name _____ | Year _____ |

## Description of Survey Area

Dates for Fieldwork: Start 12-3-2015 End 12-7-2015 Total Area Surveyed (fill in one) \_\_\_\_\_ hectares 14.1 acres

Number of Distinct Tracts or Areas Surveyed 3

If Corridor (fill in one for each) Width: \_\_\_\_\_ meters \_\_\_\_\_ feet Length: \_\_\_\_\_ kilometers \_\_\_\_\_ miles



## Research and Field Methods

Types of Survey (check all that apply): ☒ archaeological ☐ architectural ☒ historical/archival ☐ underwater  
☐ damage assessment ☐ monitoring report ☐ other(describe): \_\_\_\_\_

Scope/Intensity/Procedures background research, systematic & judgmental subsurface testing (24 @ 25 m, x @ 100m), 50 cm diameter, 1 m deep, 1/4" screen

## Preliminary Methods (check as many as apply to the project as a whole)

☐ Florida Archives (Gray Building) ☒ library research- *local public* ☐ local property or tax records ☒ other historic maps  
☐ Florida Photo Archives (Gray Building) ☐ library-special collection - *nonlocal* ☐ newspaper files ☒ soils maps or data  
☒ Site File property search ☒ Public Lands Survey (maps at DEP) ☒ literature search ☒ windshield survey  
☒ Site File survey search ☐ local informant(s) ☐ Sanborn Insurance maps ☒ aerial photography  
☐ other (describe): \_\_\_\_\_

## Archaeological Methods (check as many as apply to the project as a whole)

☐ Check here if **NO** archaeological methods were used.  
☒ surface collection, controlled ☐ shovel test-other screen size ☐ block excavation (at least 2x2 m)  
☐ surface collection, uncontrolled ☐ water screen ☐ soil resistivity  
☒ shovel test-1/4" screen ☐ posthole tests ☐ magnetometer  
☐ shovel test-1/8" screen ☐ auger tests ☐ side scan sonar  
☐ shovel test 1/16" screen ☐ coring ☐ pedestrian survey  
☐ shovel test-unscreened ☐ test excavation (at least 1x2 m) ☐ unknown  
☐ other (describe): \_\_\_\_\_

## Historical/Architectural Methods (check as many as apply to the project as a whole)

☒ Check here if **NO** historical/architectural methods were used.  
☐ building permits ☐ demolition permits ☐ neighbor interview ☐ subdivision maps  
☐ commercial permits ☐ exposed ground inspected ☐ occupant interview ☐ tax records  
☐ interior documentation ☐ local property records ☐ occupation permits ☐ unknown  
☐ other (describe): \_\_\_\_\_

## Survey Results (cultural resources recorded)

Site Significance Evaluated? ☐ Yes ☐ No

Count of Previously Recorded Sites \_\_\_\_\_ Count of Newly Recorded Sites \_\_\_\_\_

Previously Recorded Site #'s with Site File Update Forms (List site #'s without "8". Attach additional pages if necessary.) \_\_\_\_\_

Newly Recorded Site #'s (Are all originals and not updates? List site #'s without "8". Attach additional pages if necessary.) \_\_\_\_\_

Site Forms Used: ☐ Site File Paper Form ☐ Site File Electronic Recording Form

**\*\*\*REQUIRED: ATTACH PLOT OF SURVEY AREA ON PHOTOCOPY OF USGS 1:24,000 MAP(S)\*\*\***

## SHPO USE ONLY

## SHPO USE ONLY

## SHPO USE ONLY

Origin of Report: ☐ 872 ☐ CARL ☐ UW ☐ 1A32 # \_\_\_\_\_ ☐ Academic ☐ Contract ☐ Avocational  
☐ Grant Project # \_\_\_\_\_ ☐ Compliance Review: CRAT # \_\_\_\_\_  
Type of Document: ☐ Archaeological Survey ☐ Historical/Architectural Survey ☐ Marine Survey ☐ Cell Tower CRAS ☐ Monitoring Report  
☐ Overview ☐ Excavation Report ☐ Multi-Site Excavation Report ☐ Structure Detailed Report ☐ Library, Hist. or Archival Doc  
☐ MPS ☐ MRA ☐ TG ☐ Other: \_\_\_\_\_  
Document Destination: \_\_\_\_\_ Plotability: \_\_\_\_\_



### MacDill AFB construction parcels

Sections 21, 27 and 34 of Township 30 South, Range 18 East  
 USGS Port Tampa and Gibsonton  
 Hillsborough County





SEMINOLE TRIBE OF FLORIDA  
TRIBAL HISTORIC PRESERVATION OFFICE  
AH-TAH-THI-KI MUSEUM

TRIBAL HISTORIC  
PRESERVATION OFFICE  
SEMINOLE TRIBE OF FLORIDA  
AH-TAH-THI-KI MUSEUM  
30290 JOSIE BILLIE HWY  
PMB 1004  
CLEWISTON, FL 33440  
PHONE: (863) 983-6549  
FAX: (863) 902-1117



TRIBAL OFFICERS  
CHAIRMAN  
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VICE CHAIRMAN  
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SECRETARY  
LAVONNE KIPPENBERGER  
TREASURER  
PETER HAHN

February 3, 2016

Jason W. Kirkpatrick  
Contractor, IAP Worldwide Services Inc.  
6th Civil Engineer Squadron  
7621 Hillsborough Loop Dr.  
MacDill AFB, FL 33621  
813-695-3206

**Subject:** Phase I Archaeological Survey of Three Construction Sites at MacDill Air Force Base, Hillsborough County, Florida

**THPO#:** 0028679

Dear Mr. Kirkpatrick:

Thank you for contacting the Seminole Tribe of Florida's Tribal Historic Preservation Office (STOF-THPO) regarding the proposed construction at three sites on MacDill Air Force Base, Hillsborough County, Florida. This letter is to acknowledge that the STOF-THPO has reviewed the report technical report *Phase I Archaeological Survey of Three Construction Sites at MacDill Air Force Base in Hillsborough County, Florida* and has no objection to your finding of "no historic properties affected" at this time. However, the STOF-THPO would like to be informed in the event that any archaeological, historical, or burial resources are inadvertently discovered during execution of the undertaking. Thank you and we look forward to working with you in the future.

Respectfully,

Andrew J. Weidman, MA, RPA  
STOF-THPO, Compliance Review Section  
30290 Josie Billie Hwy, PMB 1004  
Clewiston, FL 33440  
Office: 863-983-6549 x12216  
Email: andrewweidman@semtribe.com